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June 21, 1965

RAILWAY AGE WEEKLY

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Today's motive power —and tomorrow's

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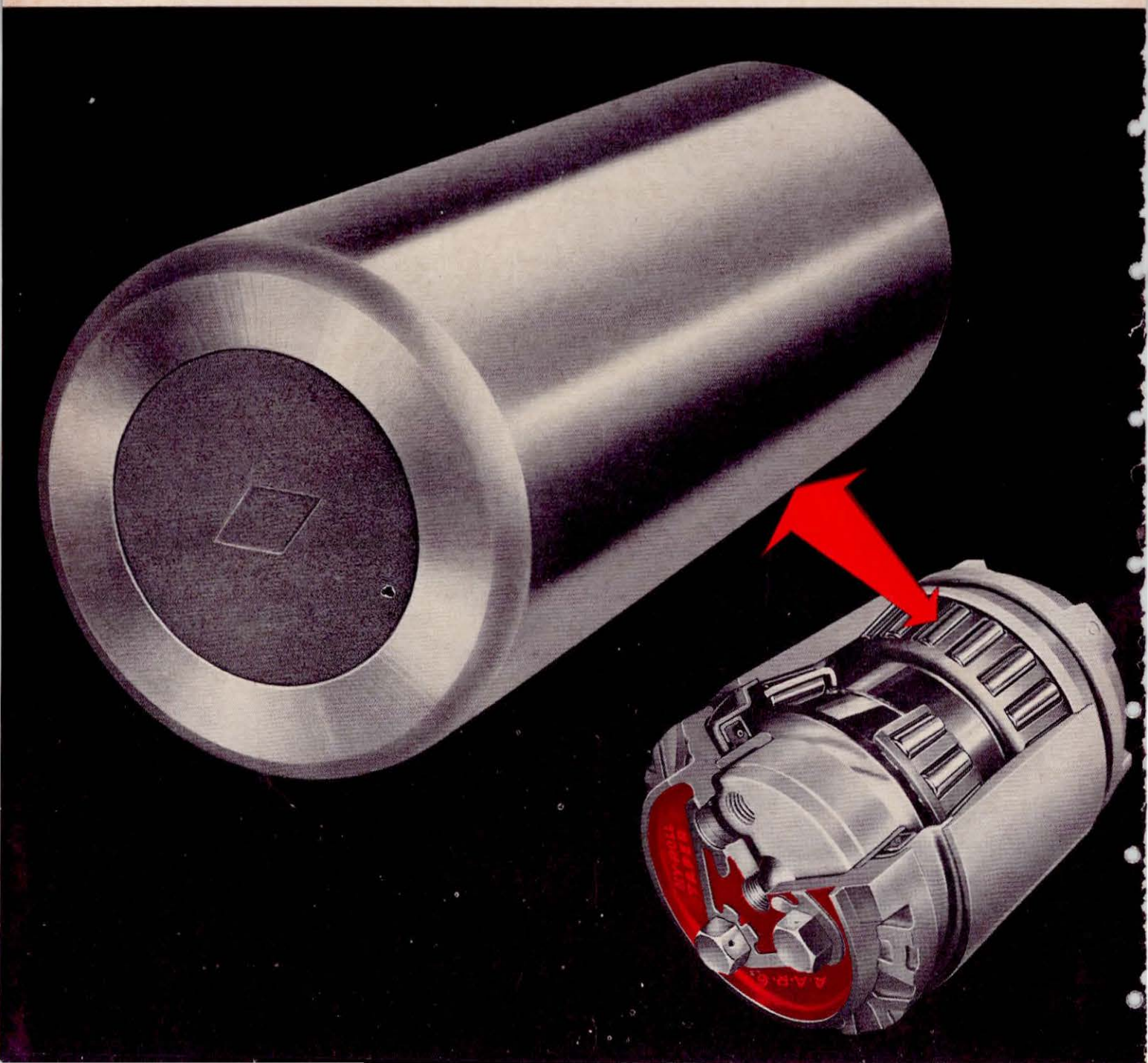

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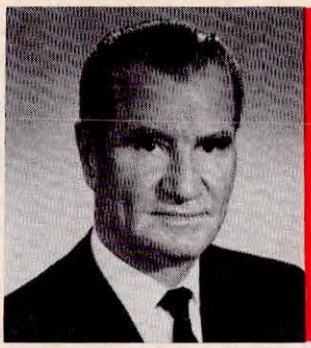

UP'S BAILEY TALKS ABOUT:

Today's motive power—and tomorrow's

In an exclusive interview, UP's president profiles his railroad's power, operations, and prospects **p.36**

Car design gets a going over

Freight-car flexibility was the main topic of conversation of builders and buyers at a recent RSMA seminar **p.11**

Mechanical Division meets this week

The meeting is to be held in the Grand Ballroom of the Sherman House, Chicago. Here's the program **p.35**

How Frisco improves its sales techniques

The road has stepped up its already-intensive campaign of training salesmen and sales managers **p.58**

Civil Rights Act of '64 goes into action

Here's how employers and unions are affected by the act's equal-employment-opportunity section **p.66**

The Action Page—Tax bill needs industry push

Discriminatory taxation is still one of the major problems facing the nation's railroads **p.84**

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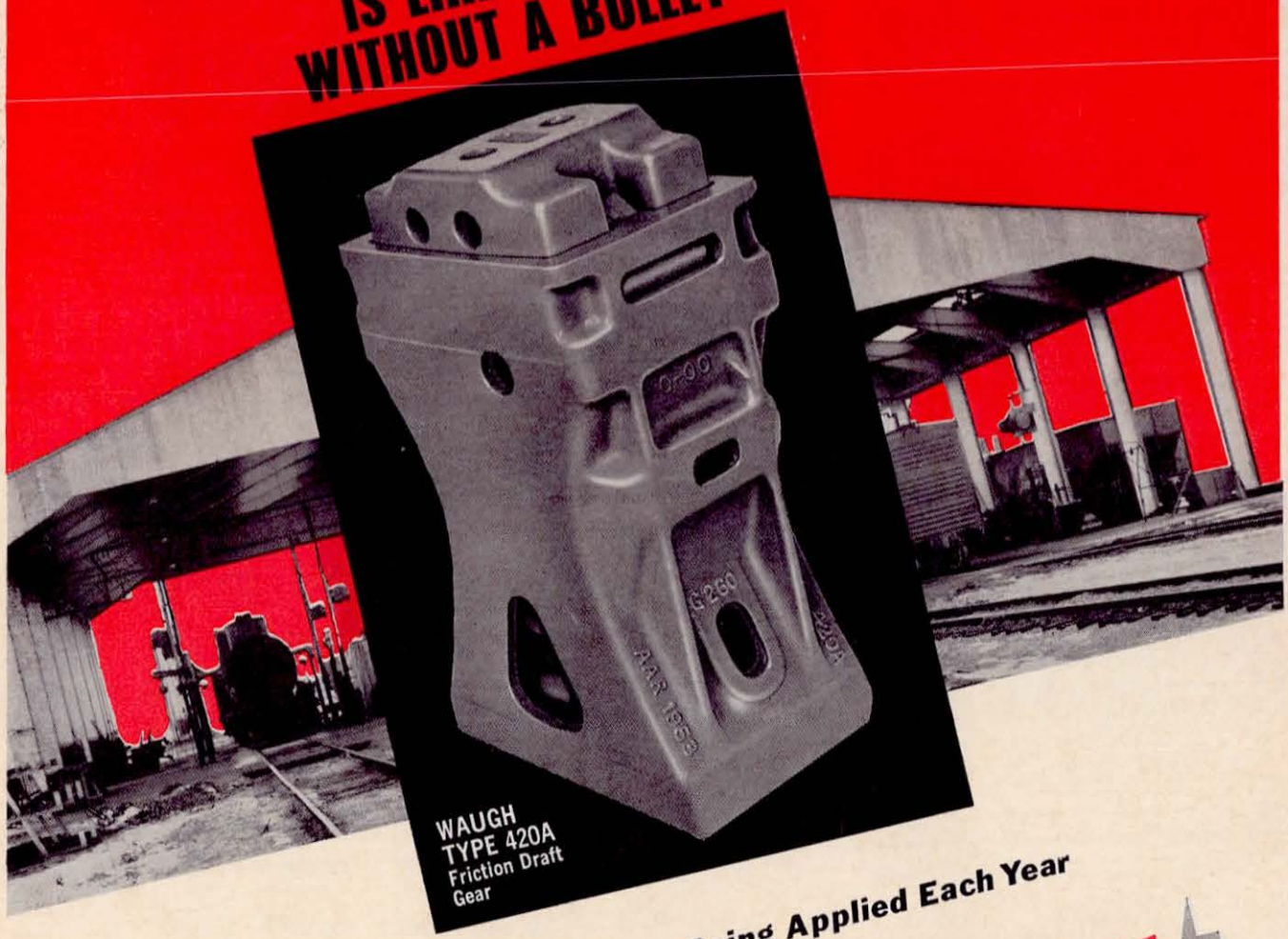

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SHORT AND SIGNIFICANT

Northerns merger now before ICC for decision

The Northerns merger case is now awaiting action by the ICC. The Commission last week heard oral argument on Examiner Robert H. Murphy's recommended report which advises approval of the merger plan. The plan contemplates merger of Great Northern, Northern Pacific, and the Burlington into a new company—Great Northern Pacific & Burlington Lines—which would also lease the Spokane, Portland & Seattle.

●

For mass transportation: 'You've got to spend'

A successful mass transportation system is built on many factors. But, as General Manager B. R. Stokes of the San Francisco Bay Area Rapid Transit District sees it, at least two are absolutely essential. First, Stokes told the annual meeting of the Metropolitan Housing and Planning Council in Chicago, "you must make up your minds that it is going to cost lots of public money—but it will be well worth it." And second, he emphasized, the system "must be able to do one thing—compete with the private automobile, compete in terms of speed, comfort, convenience, and economy."

●

That BLE-BLF&E feud—it just goes on and on

The scene is Washington, the dispute is a new one, but the parties are the same. The Brotherhood of Locomotive Engineers and the Brotherhood of Firemen and Enginemen, which haven't agreed on much of anything lately, are hassling now over H.R. 8476 and H.R. 8477, two bills which would amend the Hours of Service Act. The BLF&E favors the bills which would reduce the number of hours operating employees would be permitted to work within a given period. But the BLE is opposed—on grounds that the bills provide no protection against "drastic cuts in take-home pay for engineers." The Engineers, terming BLF&E support for the bills "more BLF&E 'spread the poverty' policy," says they're in favor of shorter working hours—but not at the expense of reducing earnings.

●

Cleveland gets the cash to expand rapid transit

One of the big complaints of many air travelers is that it often takes longer to travel between downtown and the airports of traffic-choked cities than it does to fly from city to city. Clevelanders and others who use the city's Hopkins International Airport will not be facing this problem after August 1967. The Housing and Home Finance Agency has just granted $6.9 million to the Cleveland Transit System for a four-mile extension of its rapid transit line. The grant is being made under the Urban Mass Transportation Act of 1964. The new section to the airport —which will cost a total of $13.9 million—will use New York Central right of way. CTS plans to buy 20 new cars to serve the line.

●

For the Trainmen, another loss on SP

The Brotherhood of Railroad Trainmen isn't having much luck in representation elections on Southern Pacific. In an earlier vote, resulting from merger of SP's Pacific and Eastern lines, the BRT lost to the Switchmen's Union of North America. Now, the Trainmen have bowed, 734 to 586, to the Order of Railway Conductors & Brakemen in an election involving road conductors. The Conductors, obviously happy with the outcome, called the balloting "a victory for craft and class autonomy." For the BRT, it was not only the second defeat on SP but also the second defeat in recent months by the ORC&B. The Trainmen also lost a challenge on Chicago & North Western in which they tried to wrest representation rights for conductors from the smaller group.

MONDAY MORNING REPORT

Information gap still a top problem

Two large meetings of railroad officers last week seemed to be shooting at the same target: the need for industry officers to be aware of what other railroad officers are thinking and doing. Members of the Railroad Public Relations, Railroad Personnel and American Railway Magazine Editors associations meeting at New Orleans June 14-16 were continuing a dialogue in industry communications that has been getting hotter in recent months. Upriver at St. Louis, the American Association of Railroad Superintendents met June 15-17 to hear reports on a variety of subjects (RA, June 14, p. 26), but wound up in several discussions also concerned with communications.

Everybody's problem is whose responsibility?

Fundamentally, both the meetings were assessing the same tough problem—the information requirements of change. How do you cope with them? Both groups wrestled with what seems to be a widening gap between general operating officers and industry specialists, the lawyers, personnel and labor relations experts, public relations and communications people whose work and decisions are affecting industry policy and administration more and more each passing day.

Wolfe notes some blurred and fuzzy thinking

Many problems discussed at both New Orleans and St. Louis last week had the same tap root—understanding. As one superintendent put it after the AARS meeting, "We discussed operations but always seemed to be talking of the same difficult task of how to identify and handle changing definitions without impairing efficiency." J. E. Wolfe, chairman of the National Railway Labor Conference, told the joint RPRA-RPA-ARMEA meeting at New Orleans that there is entirely too much fuzzy thinking about industry communications with employees and that the absence of adequate industry effort to win the minds of railroad men and women leaves the field to the unions. "I fear," noted Wolfe, "that too often the distinction between labor relations—our dealings with unions—and our relations with the employees themselves becomes blurred in our thinking." A few days later, a speaker at the AARS meeting in St. Louis cautioned the superintendents against the tendency to ignore the line between policy and administration. There is often good reason for doing things the way specialists insist they be done, he noted, but wondered if there isn't some way of letting the right hand know what the left hand is doing.

Why don't the specialists speak up?

Much discussion at both meetings attempted to define the information needs of changes already made and changes just ahead in the industry's total technological, employment and competitive climate. Predictably, neither group got many answers, and the reason, largely, seems to be the shape toward which standard rail officers are evolving. The ever-increasing specialization of industry officers is bringing with it a penalty in terms of the cross-knowledges old-time officers frequently possessed.

Needed: a three-way stretch in communications

There was a clear indication at both meetings of a third dimension to the information requirements confronting railroads as they make headway against the competition. The third dimension is a substantial need for operating officers to "talk" to public relations men, for public relations men to talk to personnel men, for labor relations men to talk to lawyers—and for all the industry's officers to have a clear knowledge of the changing conditions under which the industry operates.

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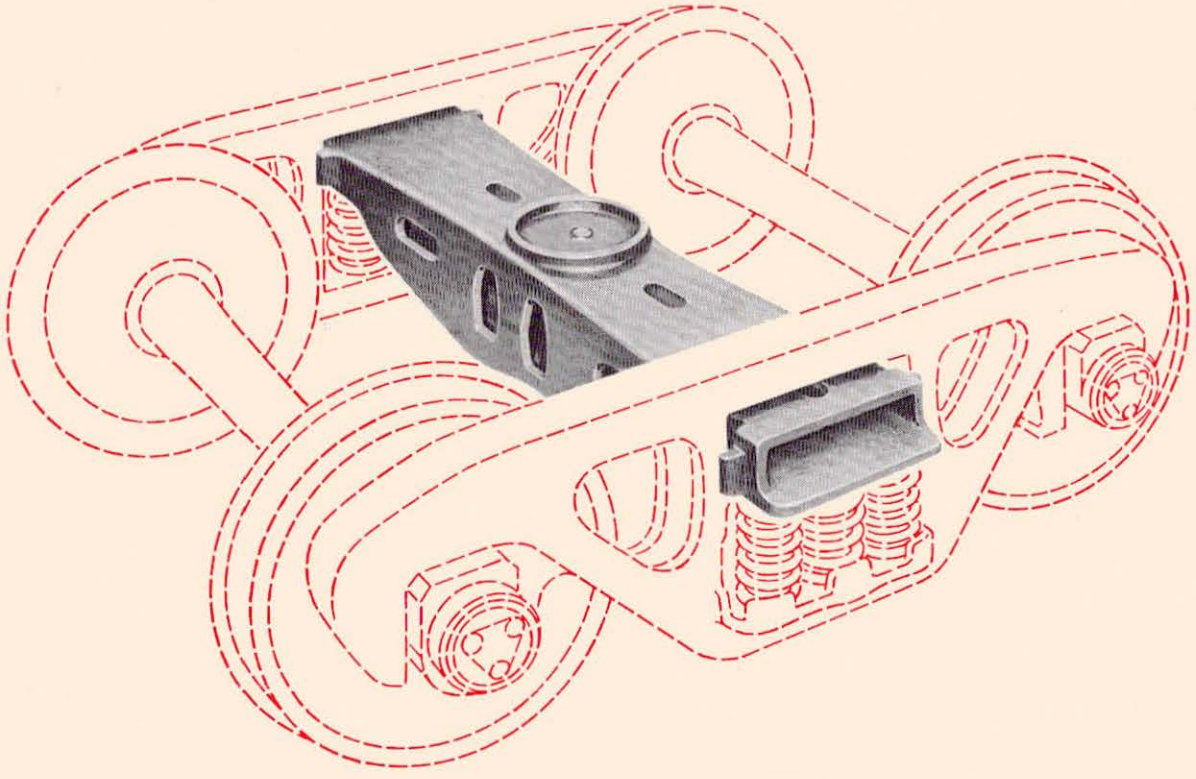

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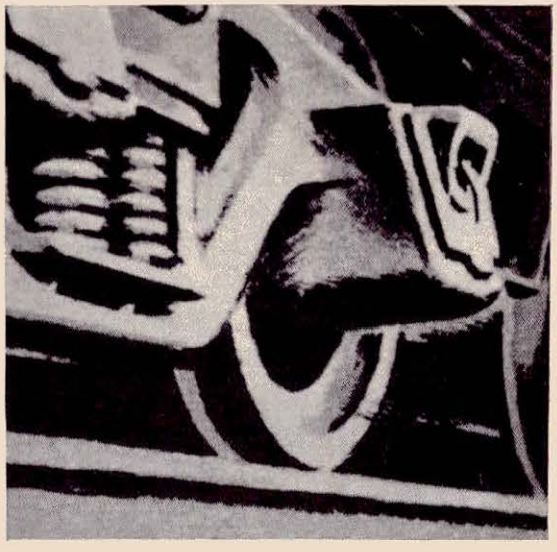


Freight-car flexibility

Car design gets a going over

Builders and buyers at a recent Railway Systems and Management Association seminar examined the plain and fancy aspects of car design and gave out with some new thoughts on the subject. A principal area of agreement: cars should have a built-in flexibility.

What will tomorrow's freight cars be like? Will they be so specialized as to be useful for one purpose and one purpose only? Or will they be specialized for one main purpose but easily adapted to several others?

To an increasing degree, both railroad men and carbuilders are agreeing that the economics of car construction and car acquisition almost demand a certain built-in flexibility in car design.

This is not a particularly new approach. Pullman-Standard long ago pushed the principle of specialized standardization. American Car & Foundry Division of ACF has taken a similar slant. And, at a recent Railway Systems and Management Association seminar, builders and buyers got together to explore a few of the many angles of car-design flexibility. It was, in effect, a discussion of the special car that isn't really special, the plain car that isn't really plain.

● **What happened to the flat car?** There was, for example, the view of R. C. Ortner, president of Ortner Freight Car Co. Taking a page from the past to write a possible plan for the future, Ortner recalled the many adaptations that have been made, some easily and some not so easily, to general-purpose flat cars. Many existing cars, he noted, were converted for piggyback service; others were equipped with end bulkheads for lumber-product and wallboard service, and still other modifications were made to permit movement of logs.

With this background of flat-car modification and change, Ortner said, "we question whether certain portions of this type car should be reinforced in places practically inaccessible after the car is built—to take into account the great possibility that end bulkheads or special hitches or hold-down devices might be added later. In the same way, a certain few underframe members could be strengthened in anticipation of the possibility of converting 70-ton equipment to 90- or 100-ton, and 100-ton cars to 125-ton capacity."

Ortner isn't proposing that every car be built to the next higher capacity grouping: "But we do propose consideration of reinforcement of such parts as the center sill webs for about eight feet from each end, which would help if bulkheads were applied later; and the use of certain heavier components in body bolsters and crossbearers, to allow railroads to put higher-capacity trucks under the cars later.

● **Now, not later.** "We do not say that this reinforcing is all that's necessary to make such conversions. This simply illustrates the type of reinforcements which can be applied easily when a car is built, but which are not economically feasible afterwards. Other needed reinforcements can be applied when the cars are actually converted."

What happens if a car-buyer spends the extra money for the added reinforcement and then doesn't make any of the planned-for conversions? As Ortner sees it, "this investment is not necessarily all lost . . . since the more rugged structure obtained is more likely to be able to resist the ever-increasing rigors of transportation demands."

Cars may be subjected to impacts over and above design requirements, he noted. Or, unusual loads may overstress individual crossmembers. And "just a very little extra material in the proper place is needed to keep even these stresses to an allowable level and thereby keep the car off the repair track and in service earning a profit."

Ortner's pitch for flexibility doesn't stop with flat cars. He also urged railroads to consider building maximum flexibility into such "general-service" cars as open-top hoppers and gondolas. His reasoning: With the development of the unit—and integral-train concept—and with the stress on maximum utilization of equipment—it's conceivable that a set of hopper-car equipment might be called upon for cycle hauling of coal, coke, ore. And each type of lading might impose different loading-unloading requirements. As for gondolas, he said, the industry has only to look back at the development of

WATCHING WASHINGTON WITH WALTER TAFT

TAFT

• **HARMONIZING** favorable ICC decisions on carrier mergers with the nation's anti-trust policy may take more doing than the Commission has thought. That's the prospect if the United States Supreme Court upholds the lower-court order which sent the Atlantic Coast Line-Seaboard Air Line case back to the Commission for reconsideration.

The outcome could have far-reaching effects—not only on ACL-SAL, but also on other big railroad mergers still pending. For the first time in the present merger movement, the Commission there approved union of railroads which are relatively prosperous, and more parallel than complementary. The case was thus quite like those involving proposed mergers of the Pennsylvania and New York Central, and of the Northern Pacific, Great Northern and Burlington.

THE COMMISSION DECISION was issued more than 2½ years ago. Generally, it found the ACL-SAL merger justified because the two roads, though relatively prosperous, were still earning less than a fair return. It also found that intra-modal competition has become less important than formerly in the transport field where inter-modal rivalry has been the recent trend.

THE SUPREME COURT got the case when ACL and SAL appealed from the lower-court ruling (RA, June 14, p. 7). The lower court was a special three-judge court in the federal district court at Jacksonville.

FLORIDA EAST COAST, the original plaintiff there, was supported by the Southern and the Railway Labor Executives' Association. The federal government, as represented by the Department of Justice, is also in the case opposing the merger. The Commission is nevertheless expected to join in the appeals to the Supreme Court, defending its order there.

THE LOWER COURT'S RULING is to the effect that carrier mergers cannot be endowed with antitrust immunity in the absence of detailed and specific findings —despite the Interstate Commerce Act's immunity provisions. The required findings, so the Court said, must hold that the result will not be monopoly or substantial lessening of competition "in any line of commerce in any section of the country."

THE COURT relied on the Clayton Antitrust Act. That act, in its Section 7, has those requirements. There, too, is an exemption for transactions approved by the ICC. But the Clayton Act also has something else to say of the Commission. That's in Section 11 which confers upon the ICC authority to enforce various sections, including Section 7—"where applicable to common carriers subject to the Interstate Commerce Act."

THAT'S IN "SHARP CONTRAST" to the ICC's lack of jurisdiction to enforce the Sherman Antitrust Act, the court noted. It seems to have meant that Sherman-Act clearance can be based on general findings, but Clayton-Act clearance can't. In other words, what the court seemed to want was precise Commission findings based on quite minutial evidence.

IMPORTANT PREREQUISITES to a merger may be overlooked "if erroneous statutory construction lies hidden in vague or insufficient findings," the court said. It explained, however, that it did not mean to bar Commission approval of a merger if it be found that disapproval would thwart the policy of the IC Act. In such a case, a Commission O.K. would stand up—"although the transaction would otherwise violate Section 7 of the Clayton Act."

coil-steel shipping methods to see the need for building maximum load-carrying ability into new cars.

• **As the builder sees it:** Another slant on flexibility—from the carbuilder's standpoint—came from George Reed, director of engineering for American Car & Foundry Division.

One of the most important but least understood roles a builder plays, he said, lies in "making a given piece of equipment more economically feasible by bringing together the requirements of several railroads, each of which has special customers each seeking special considerations."

In addition, Reed pointed out, design engineers are under an obligation not only to satisfy the demands imposed by the freight movement for which the car is being ordered but also to try to incorporate in the design the capability and flexibility to handle other movements in the future.

So far as ACF is concerned, the principle of flexibility works, for both builder and buyer. In one recent instance, Reed said, ACF made a 644-car production run of 22 different versions of 60-foot auto-parts box cars for 13 different railroads—without once interfering with the production rate. In another case, the company ran through 200 3,500-cubic-foot-capacity Center Flow cars for 33 different customers.

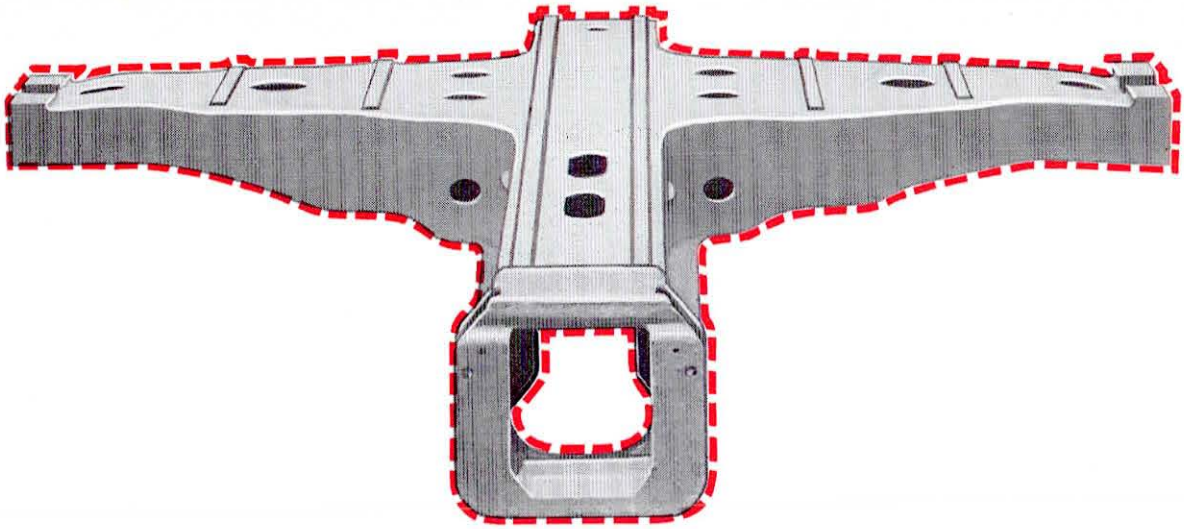
The result: "The railroads realized the economic benefits of high-volume production and still obtained specialized cars."

• **Capability is there.** ACF's engineering director also emphasized one other point: That carbuilding technology is fully able to meet the demands for equipment flexibility.

The basic technology is now available, he said, for all freight-car design developments foreseen for the near future: "Development facilities in the carbuilding industry are at a higher level today than ever before. Technological progress is coming into its own."

Among Reed's forecasts for future equipment-design innovation: New adaptations to greatly expand use of the conventional box car in specialized freight movements; and a continuing demand for even higher weight capacities for covered hoppers.

The 125-ton four-wheel truck and the 150-ton six-wheel truck were developed to meet this latter demand, he pointed out, "but this need not be the end. An eight-wheel truck has been built in prototype to further the pattern, and even the reverse trend is being explored with the use of two-wheel trucks under multiple-unit cars." ■



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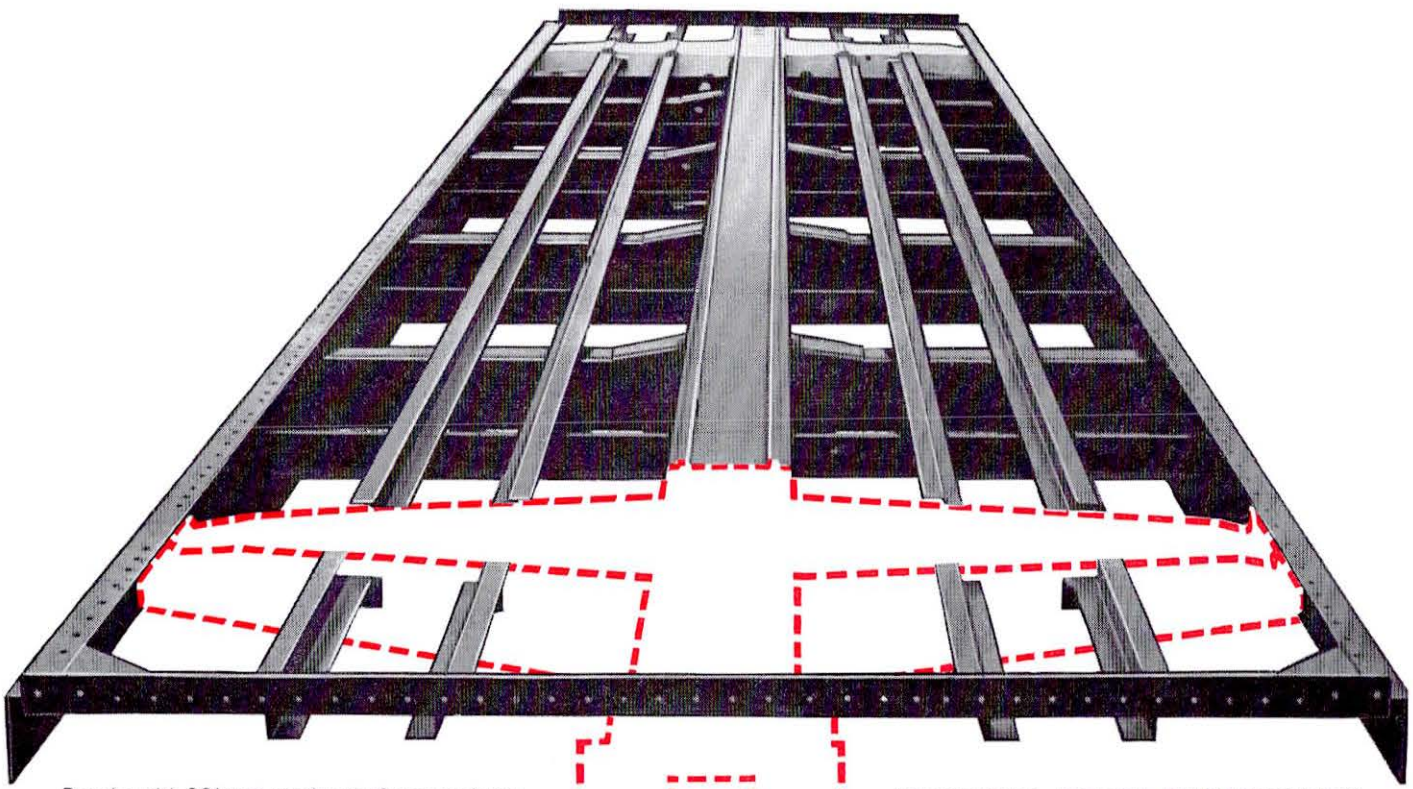

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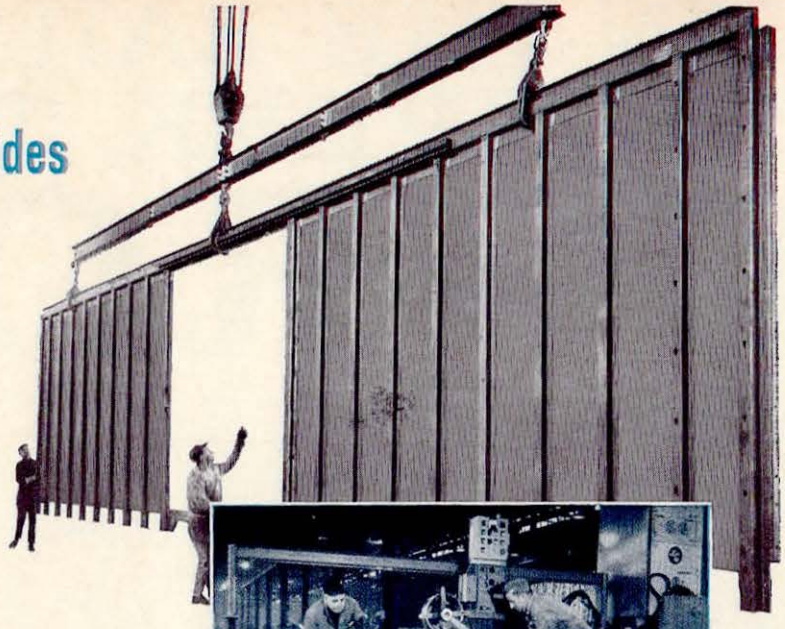

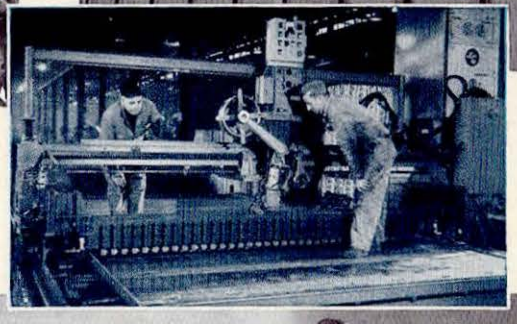

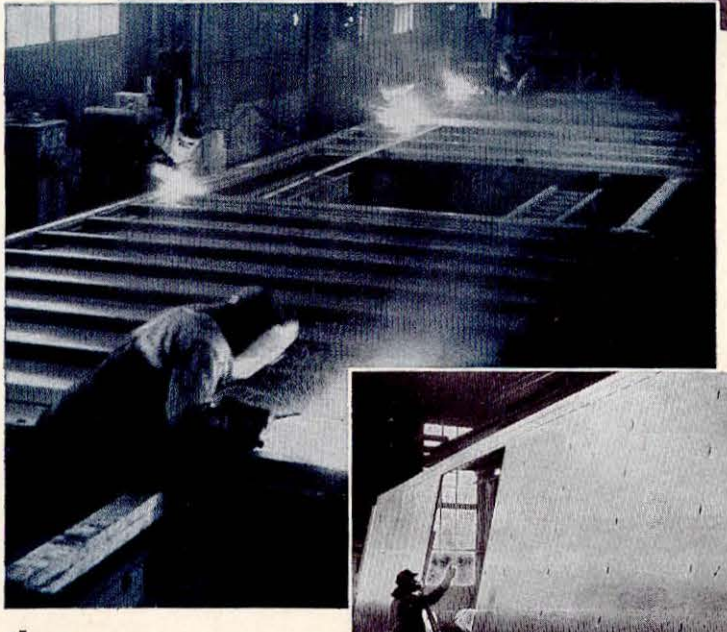

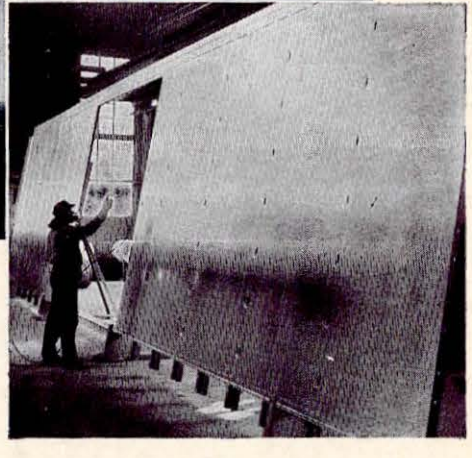

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SCHEDULE OF RAILWAY AGE TOUR

Wednesday, September 15: Leave 6:45 P.M. from JFK International Airport, New York, aboard Swissair DC-8 Jet

Thursday, September 16: Arrive in Zurich, 7:10 A.M. Leave Zurich 8:35 A.M. for 1-hour flight to Munich.

Friday, September 17 to Thursday, September 23: The entire week in Munich can be devoted to individual interests at the International Exhibition of Transport and Communications and International Permanent Way Exhibition.

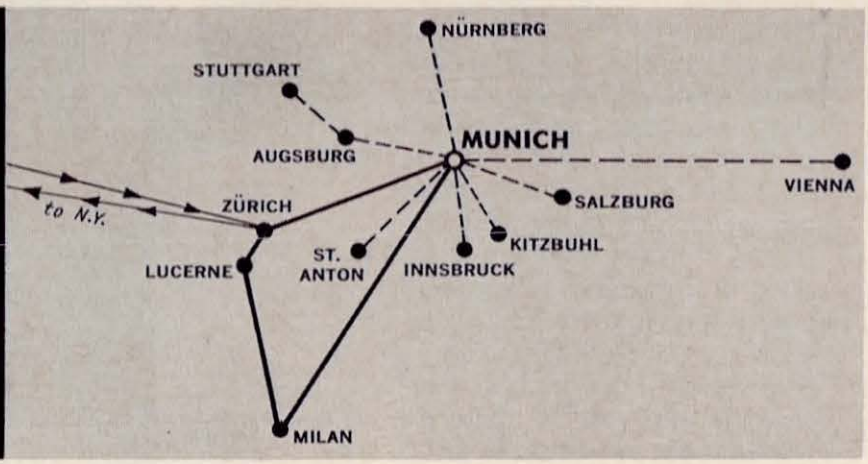
Friday, September 24: Leave 8:15 A.M. by train for Milan. Arrive early in the evening.

Saturday and Sunday, Sept. 25-26 at Milan: Tour of city's large railroad installations.

Monday, September 27: A.M. departure by train for Lucerne. Arrive early afternoon.

Tuesday, September 28: At Lucerne.

Wednesday, September 29: Leave by train for Zurich after breakfast. Leave Zurich at 1 P.M. by Swissair DC-8 Jet for a daylight return to the United States.



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Here is your opportunity as a professional railroader or railroad supply man to take a two week Air-and-Rail tour sponsored by Railway Age to visit the two big railroad shows being held in Munich this year. The summer-long First International Exhibition of Transport and Communications will feature a special week September 17-24 for professional railroaders the world over. The International Permanent Way Exhibition has been scheduled for the same week.

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The Railway Age tour will leave New York on September 15 from the J. F. Kennedy International Airport via Swissair DC-8 Jet. Arrive in Zurich early on September 16. Leave Zurich 8:35 A.M. for flight to Munich.

A summary of the itinerary is given in the column above. The tour program is for 14 days. The air fare, however, allows a stay up to 21 days, giving you the option of extending your stay in Europe for one week.

The Railway Age tour is being offered at cost—$632.40—covering round trip air fare, rail travel, hotel accommodations, hotel gratuities, two meals a day at hotels and dining car meals.

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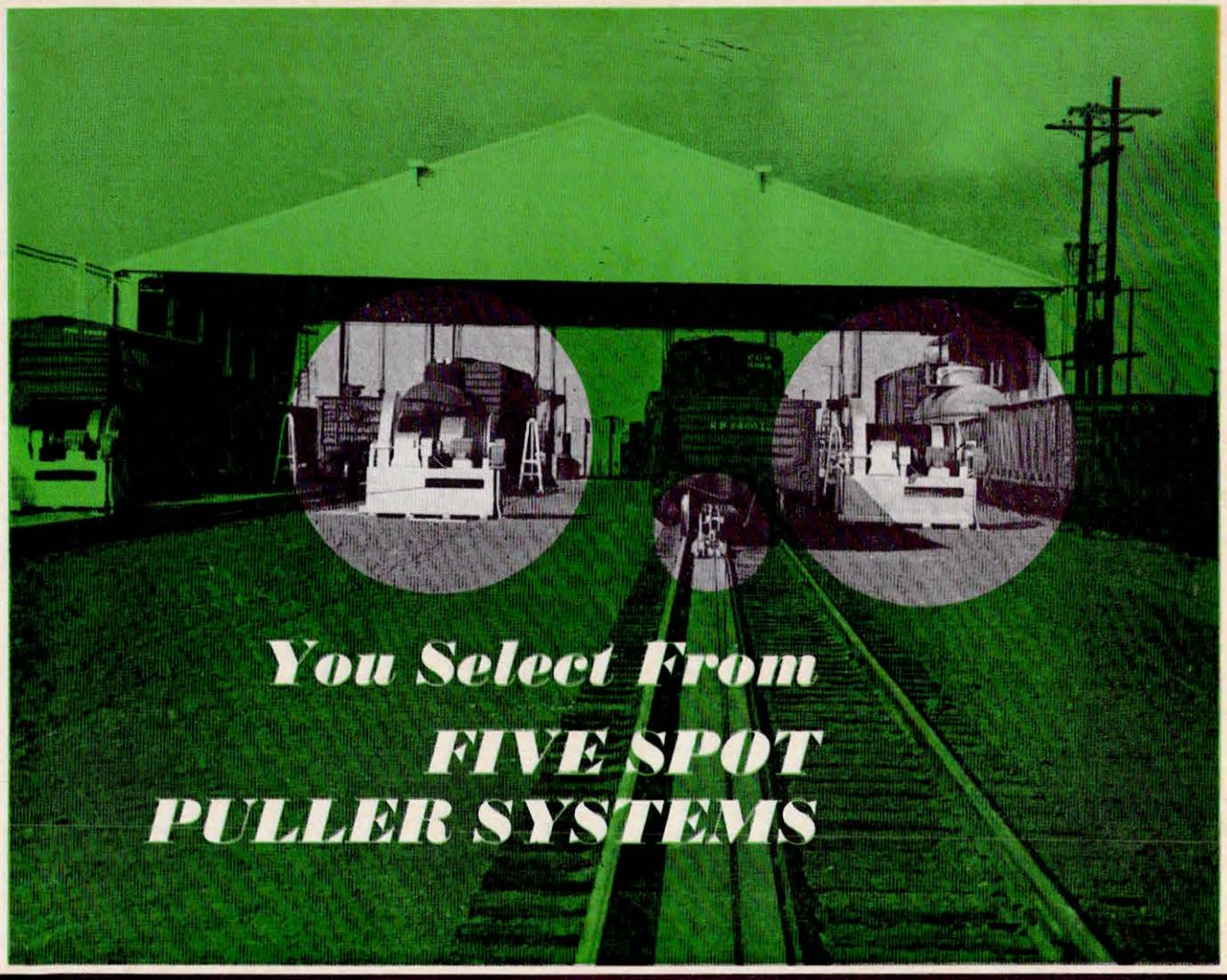

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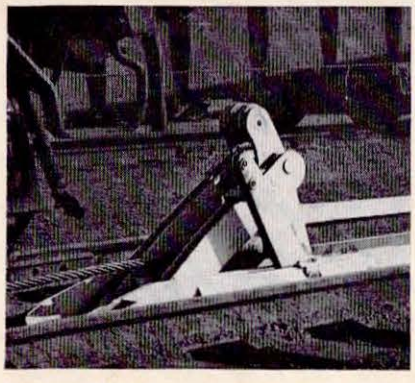
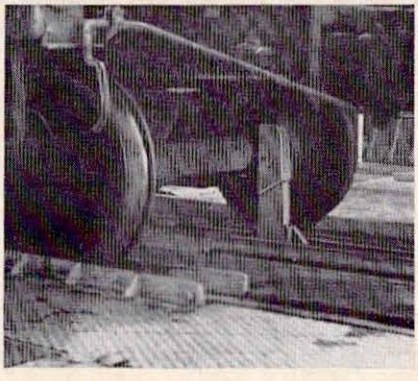
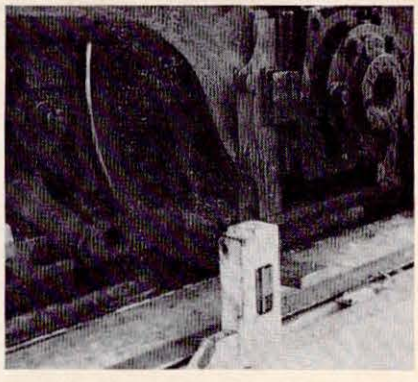


Incoming Rabbit about to engage car in Double Puller System.

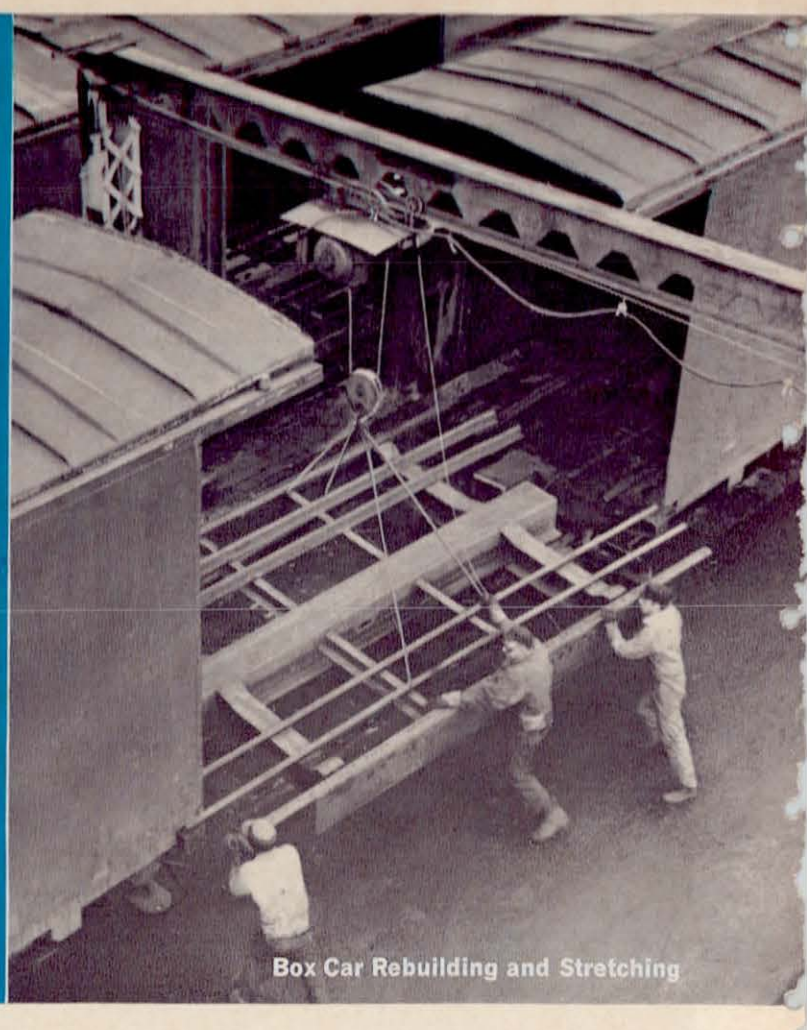


Outbound Rabbit on Double Puller System. A similar Rabbit is used in the Single Puller System.



Special Rabbit for use in Locomotive Repair System.

Remanufacturing Freight Cars?...



Box Car Rebuilding and Stretching

P-S Parts and Service offers you a wide range of help to make your program a success.

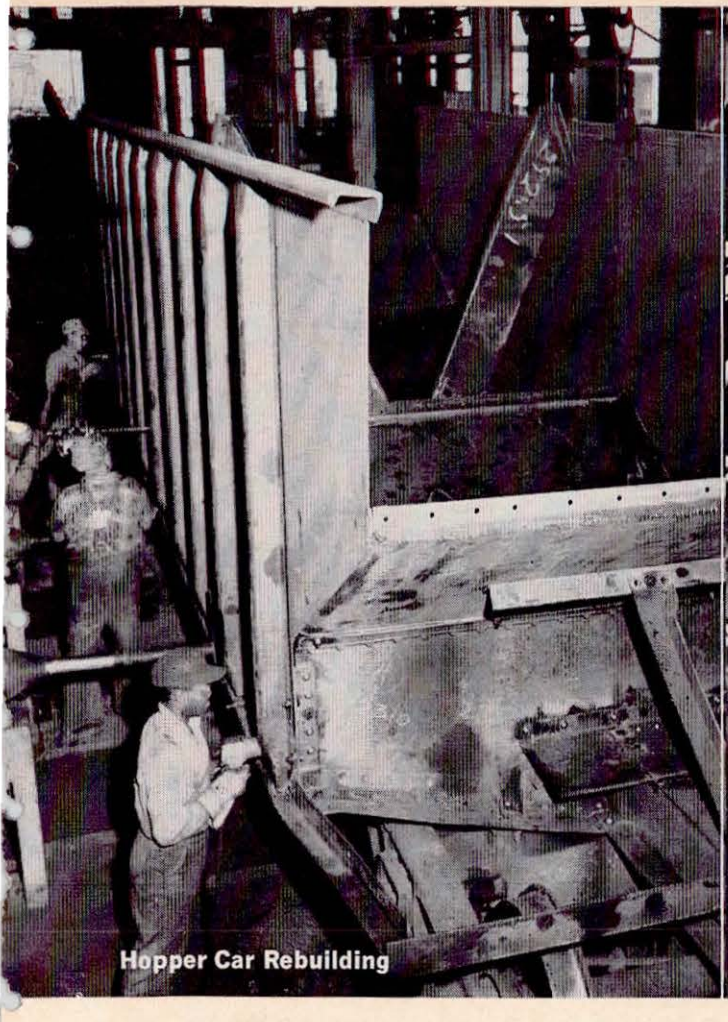
Are you planning to remanufacture, upgrade, convert or stretch out service-worn freight equipment? More and more service and economy minded railroads are doing just that. And many are looking to Pullman-Standard for the kind of help that insures the success of their programs. Four areas of assistance, based on proved experience, are available through the P-S Parts and Service Department:

1—Engineering: With Parts and Service orders Pullman-Standard can work with you to study and assist in organizing your needs. P-S parts can be adapted or developed to fill those needs. And P-S engineers can usually recommend application or assembly procedures to help you obtain maximum efficiency and economy in your rebuilding programs.

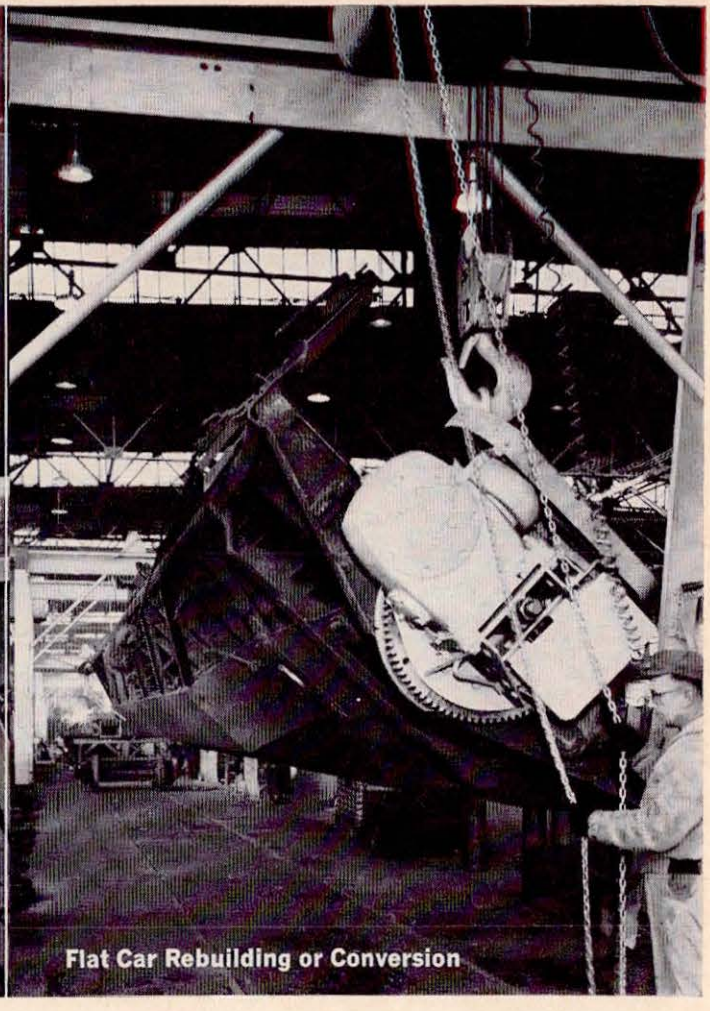
2—Production: If yours is a large P-S parts order for rebuilding to be done in your shops, P-S can furnish experienced personnel to work with your staff at the start of your program. In this way your personnel receive the benefits of P-S production methods and assembly experience. Additionally, with such orders, photographs and drawings of special application tools can be made available as additional help for your mechanical department personnel.

3—Responsibility: Pullman-Standard is noted for its readiness to stand behind all its products, including parts. Not only are P-S parts precision made, they are backed up by Pullman-Standard's reputation for dependability and responsibility.

4—Delivery: The intricate logistics of a railroad shop rebuilding program is a special P-S skill. Working with your organization, P-S can see to it that the parts needed are supplied to coordinate with your rate of utilization . . . whether that rate is fast or slow.



Hopper Car Rebuilding



Flat Car Rebuilding or Conversion

Rely On Proved Experience! The Pullman-Standard Parts and Service Department has a long and impressive record of freight equipment rebuilding . . . proved experience you can rely on. Work can take place in customer shops or within Pullman-Standard production centers. Here are some reasons why you can have confidence in P-S abilities:

Box Cars: P-S can supply a complete range of parts and services for box car rebuilding and "stretching" in P-S or railroad shops. And your box cars can be insulated, converted to greater ton capacities or given end-of-car cushioning.

Hopper Cars: P-S has wide experience in providing parts for complete remanufacture of hopper cars, rebuilding with new P-S parts from center sill up. Fifty-ton open hoppers may be rebuilt or converted to 70-ton cars. Open hoppers may be converted to covered hoppers with new P-S trough hatch roofs. Or, small parts, from hopper door frames to corner caps can be supplied for your rip track operations.

Flat Cars: P-S shops have broad experience in flat car rebuilding, "stretching" and conversion. Flat cars have been programmed for heavy rework and repairs, as needed, from the roller bearings to rub rails. And, P-S converts flats from auto rack to trailer service, from piggyback use to pipe-hauling or other special services.

You will find P-S rebuilding services most beneficial and productive of important economies if you call for them in the earliest possible stages of your program's development. Merely contact us for full discussion of your needs.

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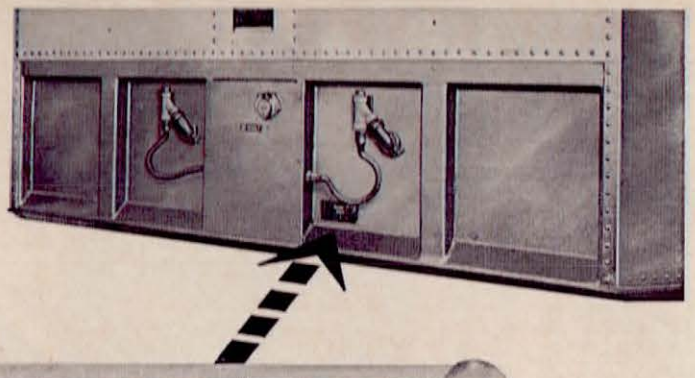

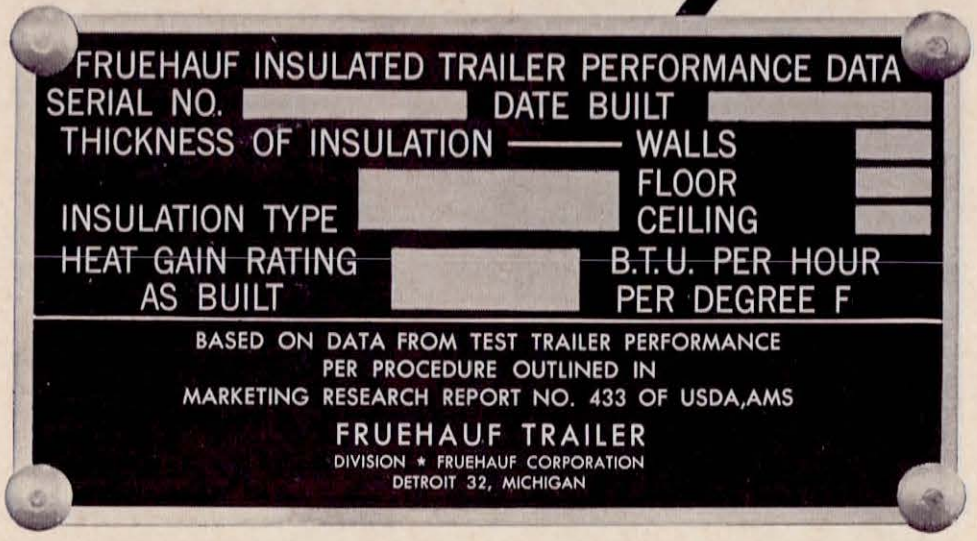

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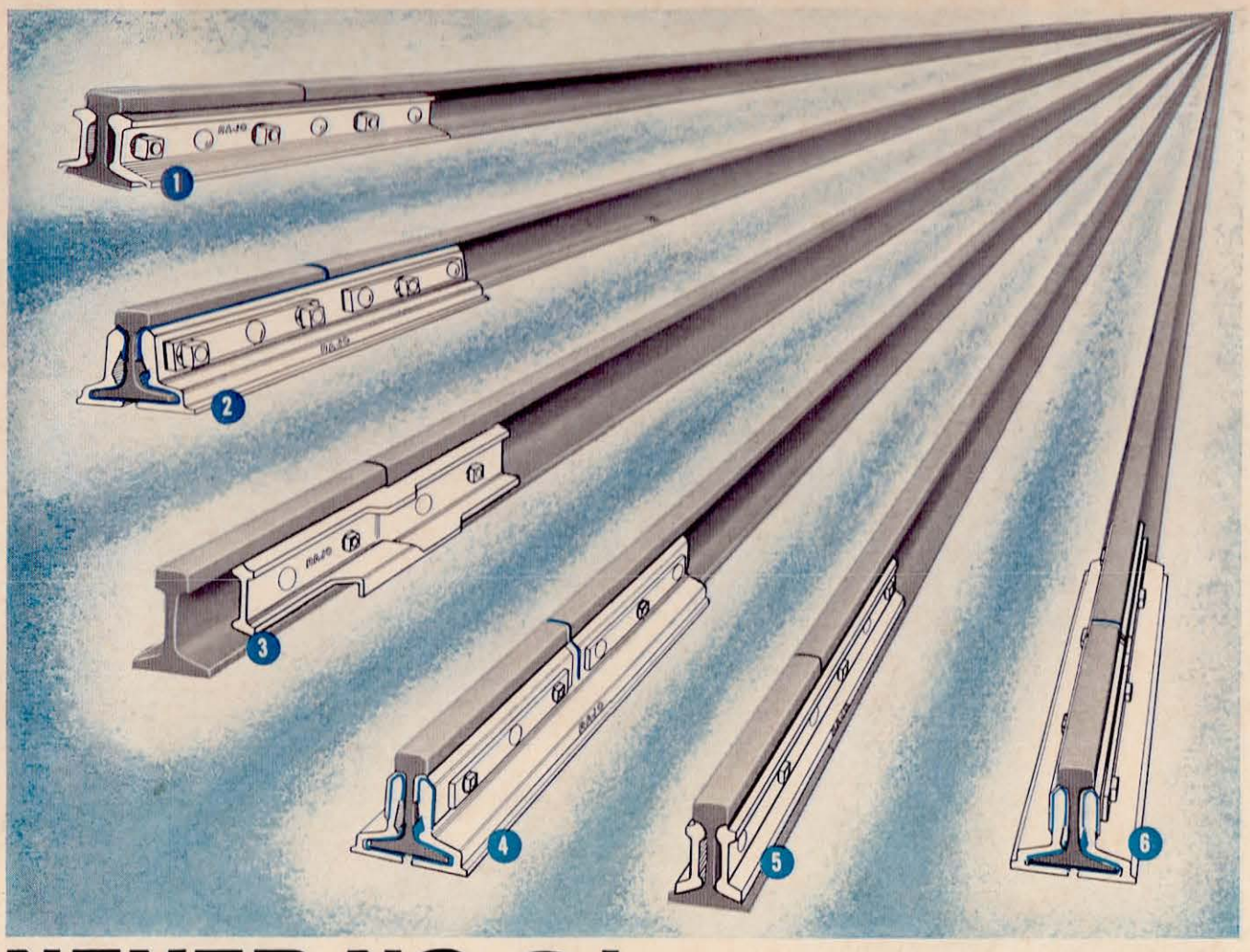

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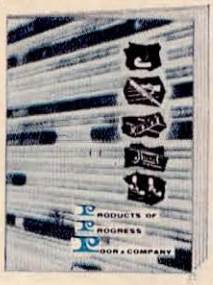

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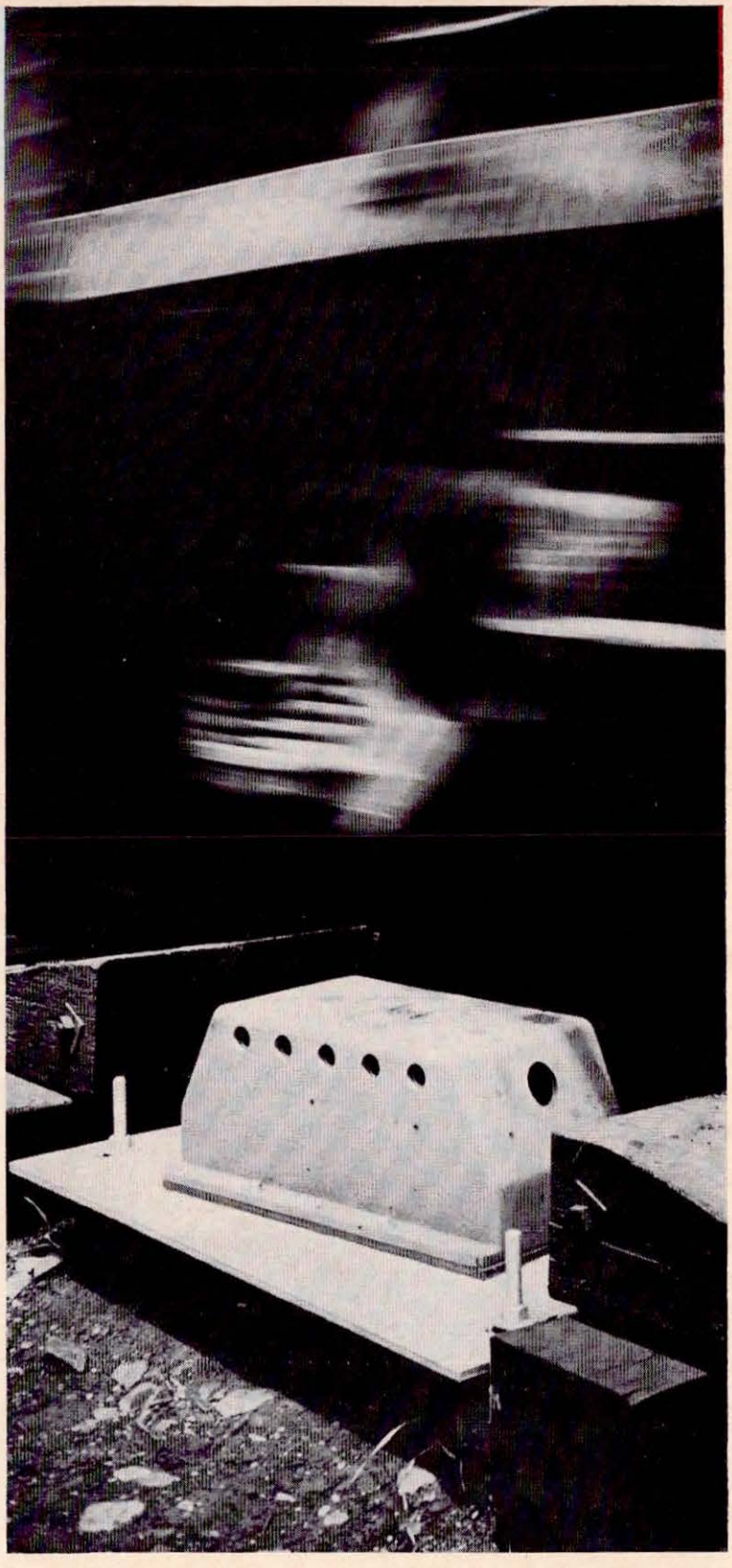
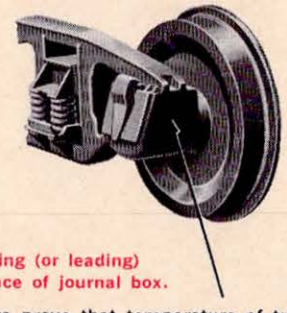


How to stop hot box derailments, damage, and delays

Back in 1956, Servo engineers perfected the technique of remote hot box detection by means of infrared. They looked at every conceivable location on and around the journal box for the most reliable indication of journal bearing heat. The best accessible area, substantiated by scientific tests made by the railroads themselves, proved to be the *trailing (and leading) surface of the journal box.*



Trailing (or leading) surface of journal box.

Tests prove that temperature of trailing or leading surface of journal box is proportional to temperature at journal-bearing interface. Presenting a low-mass path of thermal flux from the bearing, this surface rapidly reflects changes in the temperature of the bearing itself.

Based on the patented* *slant-aspect viewing* method, the sensitive infrared Servosafe® Hot Box Detective* diagonally "sweep scans" the entire trailing (or leading) surface of the passing journal box. Specifically designed to detect hot boxes, the Detective "feels" for hot boxes — and developing hot boxes — right at the source. The Servosafe system *consistently* catches dangerously overheated roller bearings as well as friction bearings . . . always sees the right target area . . . regardless of varying diameter of train wheels.

*Protected under one or more of the following U.S. Patent Nos.: 2,880,309; 2,963,575; 3,028,484; 3,095,171; 3,108,772; 3,108,773. Canadian Patent Nos.: 643,038; 643,091; 690,506; 690,907. Other U.S. and foreign patents pending.

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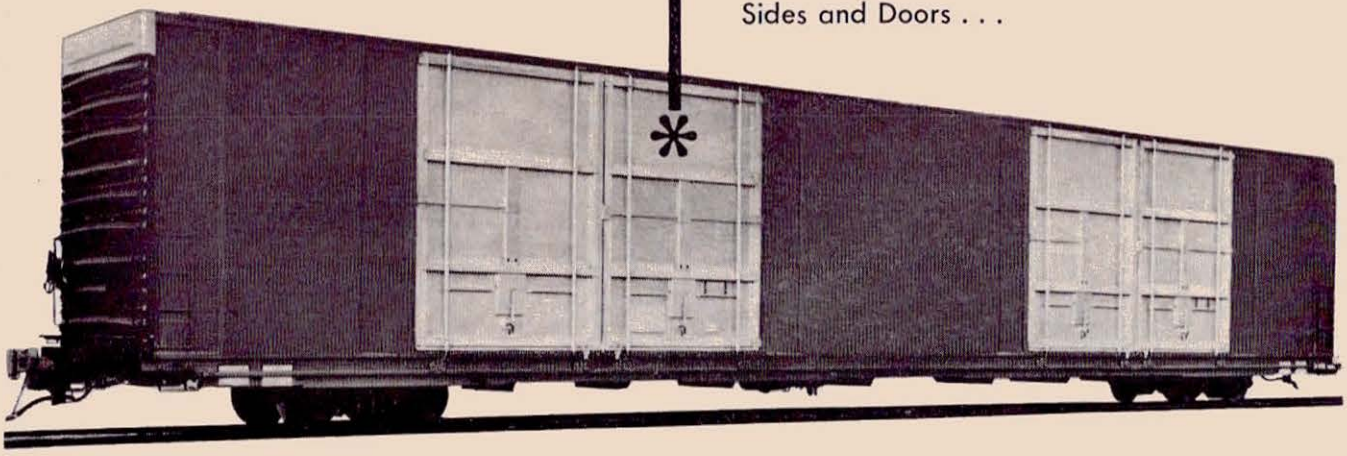

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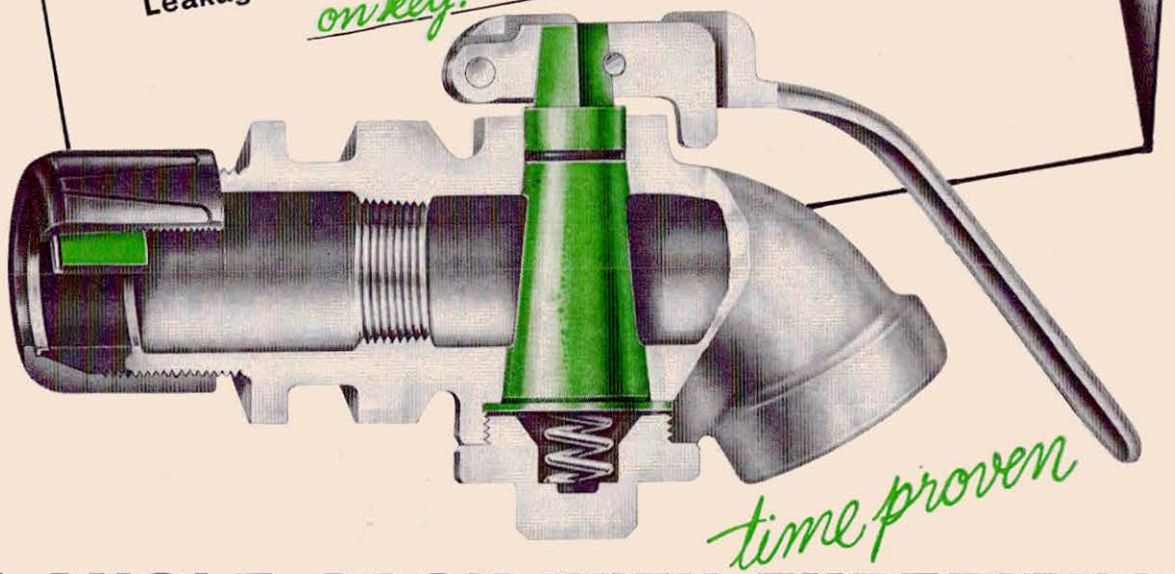

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The public-be-served attitude

Today's railroad men are marketing-minded and customer-oriented, and they're attracting and holding business for the railroads. As a result, railroading is once again a growth industry.

By Frederic J. Schroeder*

Chairman, American Railway Car Institute

For reasons often beyond its control, the railroad industry, especially in the East, came on lean times in the years after World War II.

Therefore it is most pleasant to report that nowadays, when people ask me about "the poor railroad industry," I reply: "What railroad industry are you talking about?"

They are learning that gone are those oldline railroad chiefs who attributed all of their woes to government and conducted their business as though they were back in a day when there was no competition for the shipper's dollar. A new breed of railroadmen has come along to take their place.

And they differ from railroaders of the past in their approach to their customer—the shipper. The New Breed of railroadman is marketing-minded, customer-oriented. He is determined to reach out and capture—or recapture—business that properly belongs on the railroads.

It long has been the proud boast of the railroads that they can haul a ton of freight one mile far cheaper and more efficiently than common carrier trucks. But that was akin to the retailer underselling his competitors with goods that he did not have in stock.

Today, however, railroads are well on their way with new-look rolling stock that makes their more economical means of distributing goods a reality.

Item: Once the rails hauled most motor cars to market, using box cars into which they could get four automobiles. Truckers eventually took away all but 10% of the business. But autorack freight cars, each of which can carry as many as 15 automobiles in three tiers, were put at the service of the railroads five years ago by the railway carbuilders. Now there are 12,000 rack cars in use and they carry over one-third of the auto industry's output.

Item: By replacing 50-ton box cars in grain service with 100-ton hoppers, which were equipped with money-saving materials-handling features, they give an outstanding service to farmer, shipper and consumer.

Item: Cushioned containers and box cars with outsize capacity.

These materials-handling concepts were spurred by research-minded carbuilders, who have spent tens of millions of dollars in this New Era of Railroading to give the carriers the muscle they needed in the fiercely competitive transportation business. Often, these new concepts were the fruit of team effort in which railroads and shippers joined with the carbuilders. Result: We are witnessing more changes on the railroads, in the 1960's than in the entire first half of this century.

If railroads spend only modest sums on research and development (about $6 million a year)—at least by comparison with manufacturing companies—it is because of the peculiar nature of the industry. After all, an RCA, GE or IBM will recapture costs—and then some—from research and development. But a railroad, as a general proposition, can only apply costly refinements and new ideas to a relatively small number of cars in its fleet. The commercial carbuilder, of course, has a broader market for products and services.

Cooperation helps

Interplay among railroads, shippers, carbuilders and other suppliers in R&D makes economic sense. the only question is whether this joint R&D effort as it exists today has enough muscle behind it. This interplay, at modest cost in men and money, is calculated to develop ideas and products to make railroads modern and competitive.

This is not, of course, a new concept. Southern Railway collaborated with Magor to develop the Big John aluminum hopper cars; Frisco joined with Pullman-Standard to create multi-rack auto cars; United States Steel joined with P-S and Atlantic Coast Line to create the Whopper Hopper. And Ford Motor Co., American Car & Foundry and Wabash (with P-S and Louisville & Nashville also participating) developed an 85-foot, 10,000-cubic-foot-capacity box car.

Nor can we stress strongly enough the need for intense cooperation in marketing and research, for we must obtain maximum mileage for our dollars. Unlike air carriers, which are the beneficiaries of the bleed-off from federal defense dollars, railroads must lift themselves up by their own bootstraps.

They have the momentum: 1964 was the third straight year of rising freight volume. Railroading once more is a growth industry. Piggyback service, as an example, sets new records each year and right now is running 16% ahead of the 1964 level. This is a broad-horizon business, with penetration still only 3% of total carloadings. Unit trains, a new concept in handling coal, ore and grain, have made enormous strides. About 25% of the coal moved by railroads last year was hauled in unitized trains. Special cars geared to the needs of shippers have brought vast quantities of freight back to the rails.

I have estimated that railroads will spend, on the average, $1 billion per year during the next decade just to modernize their rolling stock. The New Breed of railroadmen is striving to make up for a generation of underspending on capital equipment, which left them in the poorest physical condition of this century.

Still, the average age of a freight car is more than 18 years and 38% of the fleet is more than 20 years old. Just to replace 45% of our worn-out fleet, which for years has been junked faster than it has been replaced, would involve an outlay of $10 billion. That fleet total now is less than 1,500,000 cars, compared with 1,600,000 at the close of 1961. The decline in total numbers is now being arrested, and the trend to larger-capacity cars, utilized more intensely, is helping to ease car shortages.

Still, railroads have a long way to go to catch up. In 1964 there were delivered to the carriers 68,871 cars. In 1965 the total will be about the same. It has been said that in the 1970's there will be virtually nothing left of the car fleet that rode the rails in the 1950's. That conveys to me a flourishing network of railroads that has kept abreast of scientific developments.

All of this I expect to see—and more. The basis for my optimism stems from the public-be-served attitude that dominates railroad thinking today. ■

*Former president of the Magor Car Corporation, Mr. Schroeder was elected chairman of the board and chief executive officer of the ARCI in November 1964. He was a member of the governing board of the Railway Progress Institute.

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The new filter is constructed so that the pleats are mechanically ganged and connected to a flexible mesh in such a way that all pleats are free to move in unison and maintain pleat separation at all times under varying oil pressures.

The new SUPERIOR Filters with patent pending will result in longer engine life and less maintenance. The filter assures Maximum Surface Area for Maximum Dirt Loading, Maximum Filtration for Full Flow Action and eliminates by-pass problems, resulting in Maximum Service Life.

For complete information on this **New Concept Filter,** write or phone

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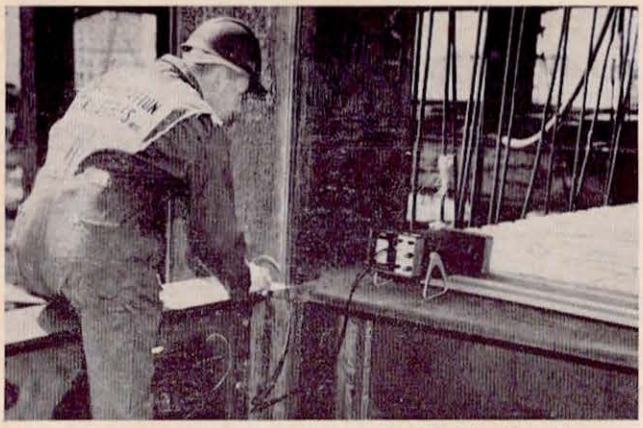
Each of the Division's locations include inspection laboratories and field crew dispatching facilities—providing nationwide and often international coverage. Overall engineering and manufacturing capability in the inspection field has played a major part in enabling the Inspection Services Division to quickly and effectively solve many special and out-of-the-ordinary inspection problems. Over 100,000 miles of pipeline inspection has been performed by the Industrial X-Ray Engineers, an example of this capability.

Whether your requirements are bridge and structural, car shop or regular rail testing, anywhere in the world, Automation Industries is ready to serve.



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Mechanical Division meets this week

J. H. HERON
Chairman, Mechanical Division

T. T. BLICKLE
Vice Chairman, Mechanical Division

The 37th annual meeting of the Mechanical Division of the Association of American Railroads will be held in the Grand Ballroom of the Sherman House, Chicago, on June 22, 23 and 24. Reports will be summarized to permit questions and discussion.

Tuesday, June 22

10 a.m. (DST)

Address—David O. Mathews, president, Chicago & Eastern Illinois.

Address—R. R. Manion, vice president, Operations and Maintenance Dept., AAR.

Address—Chairman J. H. Heron, assistant vice president—equipment, New York Central.

Reports—General Committee; Nominating Committee; Locomotives and Locomotive Fuels and Lubricants; Wheels and Axles; Specifications for Materials; Electrical Equipment—Rolling Stock; Safety Appliances.

Wednesday, June 23

9:30 a.m.

Address—J. F. Nash, senior vice president, New York Central.

Reports — Arbitration; Prices for Labor and Materials; Journal Roller Bearings; Loading Rules; Brakes and Brake Equipment; Couplers and Draft Gears.

Thursday, June 24

9:30 a.m.

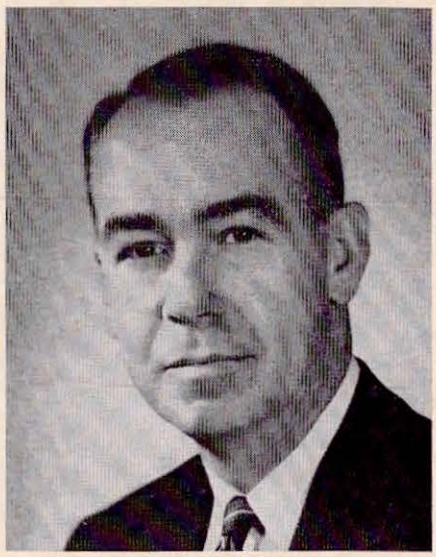
Address—W. M. Keller, vice president, Research Department, AAR. Subject: Center Plate Design Problems Which Cause Hard Swiveling of Trucks and Seriously Hamper Switch Operations.

Reports—Freight and Passenger Car Construction; Tank Cars; Lubrication of Cars and Locomotives.

Election of General Committee members.

Report—Resolutions Committee.

W. M. KELLER
AAR Vice President
(Research)



R. R. MANION
AAR Vice President
(Operations & Maintenance)

J. F. NASH
Senior Vice President, NYC

DAVID O. MATHEWS
President, C&EI

EXCLUSIVE INTERVIEW WITH

UP's EDD BAILEY

Today's motive power —and tomorrow's

Since the first of this year, Edd H. Bailey—a Union Pacific man all his working life—has been Mr. UP, the president as well as the chief executive officer of the railroad's transportation division. He's an operating man who has taken over what has long been an operating man's railroad. Here, in an interview with Railway Age Senior Editor Gus Welty, he profiles his railroad—its power, its operations, its prospects—and talks about what is and what is to come.

Q. Mr. Bailey, for more years than most people can remember, Union Pacific has been an experimenter and innovator in motive power. What has your experience been with your newest power—the 5,000- and 5,500-hp diesel-electrics?

A. It's been very gratifying. As you know, we have these high-horsepower units from all three locomotive builders. Right now, we have 42 units rated at 5,000 horsepower and three units rated at 5,500 horsepower per unit. We find that two or three of these units, making up a locomotive with a total horsepower of 10,000 or 15,000 or as much as 16,500 is the ideal power to use on our mainline service between Council Bluffs and Ogden. These diesels are the next step in operating improvement over our 8,500-hp gas-turbine locomotives.

Q. You have orders in now for more units in this horsepower range?

A. Yes, we have 23 of these coming —and there will also be 10 2,500-hp units, combination freight and passenger locomotives. Over the past two years, our total locomotive acquisition program amounts to 68 big units, and 78 units in all.

Q. In recent years, the big gas turbines have been handling 13% of UP's total freight tonnage. About how much are the high-horsepower diesel-electrics handling?

A. Some of the high-horsepower units are B units, which have been used with conventional, smaller A units. Also, many times, the high-horsepower units are used in multiple operation with conventional units. Under these conditions, the high-horsepower units are presently handling about 18% of the tonnage.

Q. With this concentration of horsepower mounted in single units, do you think UP has sacrificed any operating flexibility?

A. No. On our long-mileage grades in the West, fast-freight schedules of today—combined with our target figure on horsepower per trailing ton—mean that 15,000 horsepower is just about the ideal power for this operation. The flexibility of the larger locomotives for mainline operation is as good as that of the smaller types. And there are other advantages. In servicing, you're getting—in effect—two locomotives in one, and you're reducing the cost of required inspections. Our fleet of 2,250- and 2,500-hp locomotives will work with the larger units, and this gives us an ideal flexibility in providing the type of power that is needed for any individual train. I would say the larger locomotives are a step in the right direction—to reduce our maintenance costs and, at the same time, to take nothing away from us in flexibility.

UP: FOR UNLIMITED POWER

Union Pacific has built up an impressive stable of high-horsepower locomotives (some samples, right), and has plans to add many more. The over-all reason for overpowering trains, says UP President Edd H. Bailey, is—in a word—speed.

Q. You've had no problems in maintenance, then—for example, in having to make major changes in shops to accommodate this larger power?

A. No, at our major shops, where we concentrate our locomotive maintenance—at such places as Omaha and Salt Lake City and Albina, Oregon—we had adequate facilities to handle the larger locomotives as well as the smaller types.

Q. Mr. Bailey, UP's concentration the past few years has been on the diesel-electric. Do you foresee any further development of turbine power?

A. I believe there will come, in due course, the development of a new turbine-type locomotive along the same principles that were followed with our 8,500-hp General Electric units. But

A string of General Electric's 5,000-hp diesels

Electro-Motive's 5,000-hp unit between lead power

A group of Alco Products' 5,500-hp units

these locomotives were built to conform too closely to the present requirements of the ordinary diesel-electric. On a new turbine, controls would have to be designed so that we are not using up to 70% of the horsepower in idling position—and this is what happens on our present turbines. Just how soon this will come about is hard to say. Certainly the diesel-electric, pretty much as we know it today, will be the predominant thing in handling railroad power requirements in the foreseeable future—but the diesel-electric will get bigger.

Q. On a horsepower basis?

A. Yes. I would advocate that the locomotive builders come up with horsepower-per-unit from 3,000 for smaller types to 10,000 for the biggest.

Q. Ten thousand horsepower in a single unit?

A. That's right.

Q. How about the more exotic types of power? What's the status of the coal-fired turbine? How about hydraulic drives? And does UP have any interest in the designs that are being worked on, I understand, by such companies as Pratt & Whitney?

A. The coal-fired turbine has been a success, from the standpoint of proving that you can operate a locomotive of this type on coal. It is still an experiment. The hydraulics—they're an interesting type of power, but for our particular type of operation, we are not interested at this time. As for other types—yes, we are interested. A few companies are playing around with various ideas. I would imagine that any type of locomotive would be on the turbine principle, when it does come.

Q. What is UP's main aim, in going to this high-horsepower fleet? I've heard it said that maximum acceleration is the goal, so you can overcome the handicaps created by speed restrictions existing through a number of towns and cities.

A. This feature is a handicap to us, that's true. But the over-all reason for over-powering trains is simply to get speed. In territories where we have few curves and predominantly straight track, schedules demand that we get maximum performance. And by over-powering trains to get that, we obviously also cut down the hills and make better times there, too. Actually, no locomotive today—in through operation—is given tonnage anywhere near its rating, as we know rating or as you know rating.

Q. With this hot motive power and with the operation of longer trains at higher speeds, do you see any need for a further strengthening of the underbody components of the freight-car fleet?

A. No, I think the designers have kept abreast of this very well. Older equipment obviously is reaching the point where there are drawbar stresses, and this becomes a controlling factor as to what you can put behind the locomotive. But as a general rule, I'm sure that any cars built in the immediate past have been built to withstand anything we might want to put on the head end.

Q. What are your views on use of slave locomotive units, spaced through a train?

A. We have no immediate plans to apply the slave unit to our operation—but we are watching this application closely to see if it offers advantages that can be adapted to our use.

COOPERATION SPEEDS FREIGHT

As one means of expediting freight movements, UP and certain connecting lines are running power and cabooses through. This is a Chicago-Denver hotshot freight—operating on Burlington as CD-GI. Pooled units westbound operate onto UP at Grand Island, Neb., and continue to Green River, Wyo., before being changed.

Q. Over-powering of trains is one way of moving the freight faster. How about other improvements leading to greater efficiency?

A. For the past several years, UP has had an unusually high degree of cooperation with connecting lines—involving pre-blocking of cars so that there is a minimum of switching at intermediate terminals. Then, we are using all known improved devices in our own terminals. Walkie-talkies for carmen work to good advantage in cutting down on delays required for inspections of trains. In major yards, we have devised various types of carts and trucks which are running-repair stations—to bring repairs for minor mechanical difficulties right to the car instead of losing time by setting out a car and labeling it bad-order.

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Q. The figures indicate that UP spends somewhat less than the industry average, on a percentage basis, on improvements to fixed property. What does this indicate—that the plant has been in excellent condition and less expenditure is needed?

A. There again, we get back to the diesel. The coming of the diesel locomotive has prolonged the life of what has been and is a good track structure. That's one reason why we pour more money into equipment. The other thing, of course, is that UP—with our coal resources—was rather late getting dieselized. This required a lot of capital, which shows up in our expenditures in recent years. And, of course, we have had more millions of dollars put into freight-car programs.

Q. How substantial have UP's equipment programs been?

A. Quite substantial. Over the period 1960-64, we acquired 309 locomotives at a cost of more than $93 million. We placed in service, 9,600 freight cars, which cost $145 million. We acquired 232 new passenger-train cars, and they cost more than $23 million. The grand total for the five years was $262,697,000. This year, we have an equipment budget of $108,370,000. This covers 33 locomotives, 150 locomotives on which engines will be reconditioned, 4,067 freight cars, 500 mechanically refrigerated trailers for Pacific Fruit Express and 40 passenger cars.

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Q. Well, sir, that brings us to a big one—how about the UP-Rock Island merger proposal at this stage?

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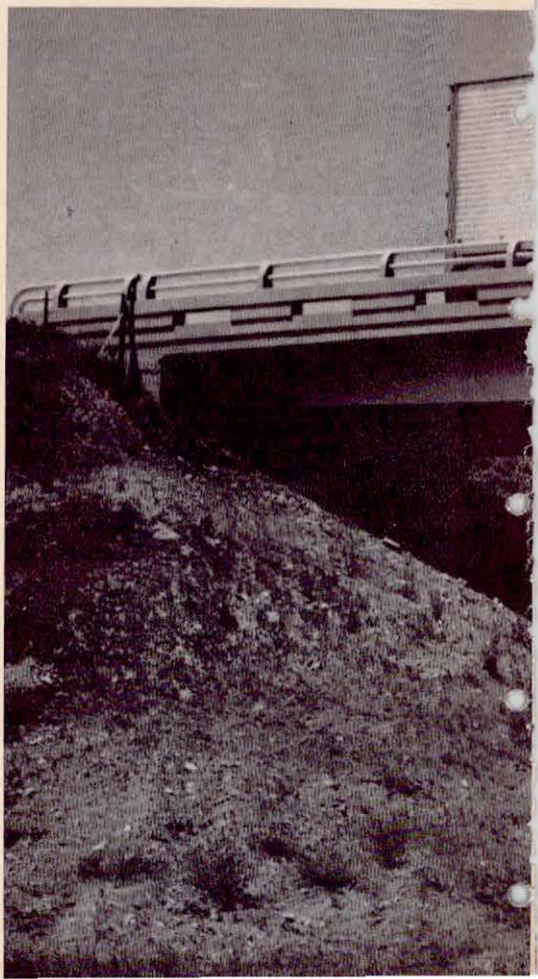
Q. Mr. Bailey, let's take a look ahead in other areas. What do you see ahead for UP in the next five to 10 years?

A. Well, I think first that we will continue to upgrade our car fleet, our locomotive fleet—and continue to have substantial new-car and new-locomotive programs. From an operating standpoint, we'll be constantly taking advantage of ways to cut down the time needed to move transcontinental traffic. We've always been proud of our part in the industry—this has always been a company with a philosophy of having the tools we need to do the job. And with this in mind, plant and equipment have always been maintained at the highest possible level.

Q. Like many heavy-spending roads, I imagine UP is finding that the number of projects with a great return on investment is getting smaller and smaller?

A. Well, on any project, of course, you have to have a proper return. We feel we have kept abreast of the major projects. We have an active program of looking for additional improvements that we can make—and, although some of them may not be highly productive in terms of return alone, they are necessary in the over-all picture and for the benefit of the over-all operation.

TURBINE-POWERED FREIGHT



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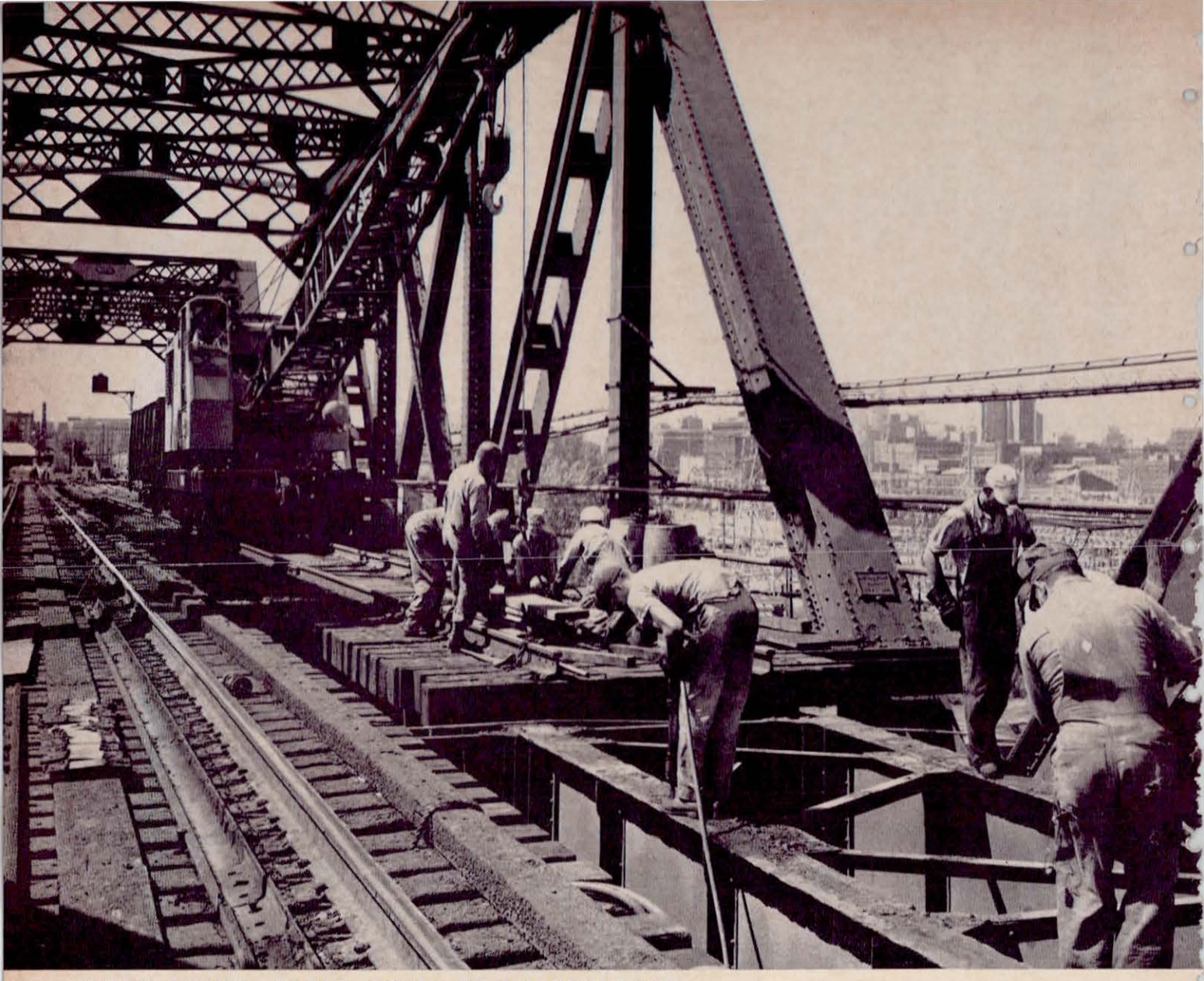

UNION PACIFIC KEEPS ITSELF IN A-1 CONDITION

UP maintenance-of-way at work — here, in a complete deck and track renovation job on the double-track bridge across the Missouri River at Omaha. Work involved installation of a steel deck and ballasted track structure.

28,900 box cars—and 1,056 passenger cars.

Q. Mr. Bailey, from an operating standpoint, how much improvement is UP showing?

A. Naturally, we're constantly trying to improve our operating ratio, through increased efficiency. We cut it from 75.9 in 1954 to 74.7 last year—and, while the percentage decrease seems small, it's quite significant, applied to the gross revenues involved in that period. And, our gross ton-miles per train-hour have increased steadily. In 1954, that figure was 75,216. Last year it was 104,226. Our average freight-train speed has gone up. For 1964, it was 29.4, which is quite a bit above the national average, and about three miles-per-hour above most major roads.

Q. And your improvements to the fixed plant have helped?

A. We've upgraded the main terminals and eliminated the intermediate terminals. This year, we have two major terminal improvements in progress —at Seattle and Spokane. Piggyback, especially, has brought terminal improvements and changes. Over the past several years, we've spent more than $3 million for modern trailer- and auto-rack-facilities. There will be more construction in this area this year, as the service continues to grow. We feel a continued program may be necessary —and studies are now being made to determine locations of possible future projects.

Q. What about ordinary maintenance?

A. We've kept pace with the requirements. Normally, we install 500,000 to 700,000 ties a year. As for ballast, we use an average of 400,000 cubic yards a year for high lift and 165,000 cubic yards for low lift. We've found that rail cropping, at certain places, has been a very beneficial thing in preserving the life of rail. And, for 1965, we have a long list of road and fixed-property capital improvements—from a dollar standpoint, interlocking changes and our installations of hot-box detectors and microwave would probably head the list for 1964-65. Over-all, we'll spend this year—for new equipment, improvements to equipment, roadway improvement, land and oil and gas development—about $138 million.

Q. Have you been able to benefit from major line changes?

A. We've had extensive programs for line changes in the past several years. We've built 54.13 miles, with a total saving in distance of 16.4 miles and a time saving on schedules for freight trains of one hour and five minutes.

Q. And where do you stand with microwave development?

A. We have about 2,400 miles, from Omaha to Los Angeles and from Salt Lake City to Pocatello, Idaho, and from Portland to Hinkle, Oregon. We're now connecting Pocatello and Hinkle, and this will complete our microwave system on mainline routes. We'll have completely adequate service for a number of communications operations, including direct distance dialing over the entire system, high-speed car reporting between yard offices and the transportation bureau here in Omaha, the handling of payroll and data like that to our computer center, and a complete teleprinter network system for handling printed matter. We're also using microwave to bridge the gap between dispatcher and CTC—for coding and voice.

Q. Mr. Bailey—about the computer center. What do you have, and what do you want?

A. We began with IBM installations in May of 1956. Now, we have such machines as the 7080, the 1401 and the 1311. We are considering replacing the present computers with the IBM System 360, to give us information in five main categories. This would make it possible for us to increase car utilization by analyzing car supply and by helping in car distribution, to measure freight-car performance and analyze earnings by type of equipment, to improve service through an analysis of current car location and requirement information, to cut down per-diem expense by minimizing the expense associated with movement of empty cars, and—most important for all other uses—to get and maintain accurate, up-to-date information on movement and location on all freight cars.

Q. Has acquisition of this new system been authorized?

A. It's still in the study stage—but it's being given serious consideration.

Q. In this same general area, what's UP's position on research?

A. Well, while Union Pacific has done a great deal of research-and-development work—such as the construction of the first coal-fired gas turbine—we do not have a formal, direct research program. At the present time, however, we are working closely with the industry in the development of the kind of new equipment we need to attract and hold traffic. UP's traffic, transportation and mechanical departments are constantly working together as a team on projects like these. This work includes conferences with shippers and carbuilders and other railway supply people—and the evaluation of innovations in equipment.

Q. Mr. Bailey, we've talked about UP's improvement programs, your efforts to get greater efficiency—how are these things showing up in terms of dollars and cents?

A. As you know, our net income for 1964 was $85.4 million—and adjusted net income, $70.6 million, was the highest in the history of the company. Freight revenues were up—actually, in 1964 UP moved the largest volume of freight traffic we're ever handled in a peacetime year.

Q. What made this record year possible?

A. I would say—our huge expenditures for equipment and property improvements, a real hard look at expenses and the streamlining of operating procedures. These efforts show in a number of ways—including the dividends we've been able to pay. Dividends on Union Pacific common stock have been paid, without interruption, for 65 years. Last year, the dividend was raised to $1.80 a share, compared with $1.70 in 1963 and $1.60 in '62.

Q. What about the pressures coming from increases in labor and material costs?

A. We've suffered, along with the rest of the industry. One item that affected us adversely last year was $4.4 million that was part of retroactive wage and fringe-benefit settlements with the labor unions. Our total labor cost, including fringe benefits, was $234.4 million in 1963. It went up to $246.3 million in 1964. This year, we can see it going to $257.0 million—and our estimate is that it will be $262.5 million in 1966.

Q. While costs have been going up, what's happened to employment?

A. During 1964, we had an average of 33,891 employees—and the average annual compensation per employee was $6,909, which was $935 more than it was in 1959. When you add fringe-

MICROWAVE EXPANDS

Only one link, Hinkle, Ore., to Pocatello, Ore., remains to be completed for UP to have a complete microwave hookup on mainline routes. About 2,400 miles are now in service.

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A. No, we don't anticipate any.

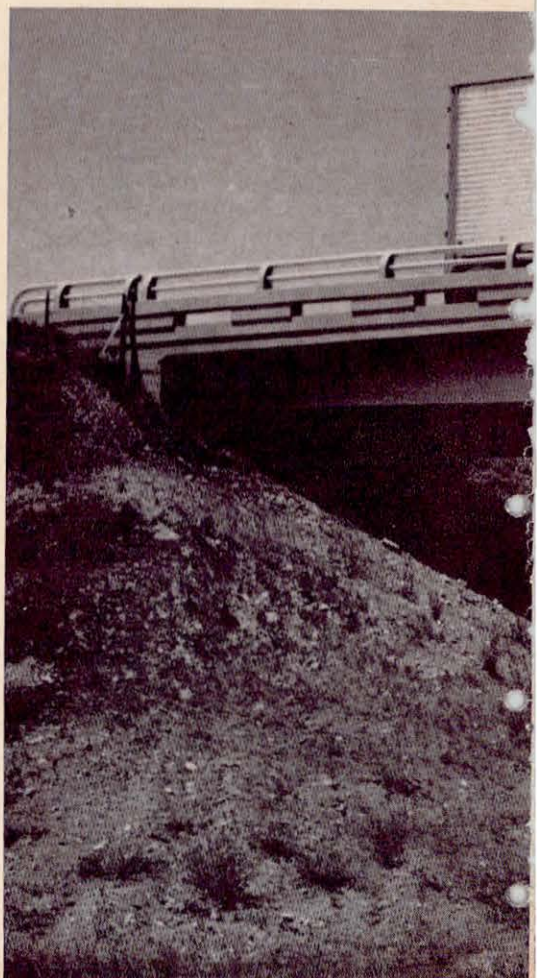
Q. Mr. Bailey, let's take a look ahead in other areas. What do you see ahead for UP in the next five to 10 years?

A. Well, I think first that we will continue to upgrade our car fleet, our locomotive fleet—and continue to have substantial new-car and new-locomotive programs. From an operating standpoint, we'll be constantly taking advantage of ways to cut down the time needed to move transcontinental traffic. We've always been proud of our part in the industry—this has always been a company with a philosophy of having the tools we need to do the job. And with this in mind, plant and equipment have always been maintained at the highest possible level.

Q. Like many heavy-spending roads, I imagine UP is finding that the number of projects with a great return on investment is getting smaller and smaller?

A. Well, on any project, of course, you have to have a proper return. We feel we have kept abreast of the major projects. We have an active program of looking for additional improvements that we can make—and, although some of them may not be highly productive in terms of return alone, they are necessary in the over-all picture and for the benefit of the over-all operation.

TURBINE-POWERED FREIGHT



ınd new-locomotive programs'

Q. How about the future, so far as the industry is concerned?

A. I think it's bright—assuming certain things take place, things like the passage of federal transportation acts which will give us more freedom in rate-making and the passage of President Johnson's transportation program. Last year, the number of ton-miles of freight service performed by the railroads increased 7%. This is encouraging—and I'm sure the railroads have no intention of merely holding the line. This accomplishment last year—that 7% increase—was brought about by providing the shipping public with exactly what it wanted: Fast, dependable service at reasonable prices. And this was done in spite of unfair and burdensome regulatory practices and subsidized competition.

Q. Finally, Mr. Bailey, with regard to your comments on rates—what's your philosophy in this area?

A. As I said, this matter of rates is one of the clouds that should be cleared away. We must have greater freedom to set rates. Regulated forms of transportation in this country today are faced with a most peculiar situation. The railroad industry, for example, has not had a freight-rate increase since the modest one in 1958. Many rates have been reduced so that we could stay competitive. On the other hand, wages and material costs have risen sharply. It's true that wage and material costs in other industries have also escalated—but the difference is that other industries have increased their prices to offset the effects of the additional costs.

The railroad industry has done a remarkable job in trying to furnish new equipment and provide good service and run the shop in a businesslike manner. But if this industry is going to continue this trend and become a recognized, healthy industry as a whole, it must have relief from increased costs —or an increase in freight rates.

Those who feel that the medium of further reduced freight rates is a source or a way of staying competitive are in for a sad awakening, if the present trend continues. The railroad industry will deteriorate, rather than move forward with the rest of the economy and the way of life we know and expect to continue. ■

EDD BAILEY: UP THROUGH THE RANKS

As a 17-year-old, Edd H. Bailey was a Union Pacific man —and he's been one ever since. Bailey, now president and chief executive officer of the railroad's transportation division, started as a helper in the car department at Cheyenne, in 1922. He came up through the ranks of the operating department — from machinist helper, to special agent, to brakeman, conductor, trainmaster, assistant superintendent. In the years after World War II, he was a division superintendent, and in 1950 he was named general superintendent of UP's eastern district at Cheyenne. He then served a hitch as general superintendent and later general manager in Portland, Ore., before coming into Omaha in 1954 as general manager of the eastern district. He was appointed vice president-operations in 1957, chief executive officer of the transportation division Jan. 1, 1964, and president Jan. 1, 1965.

and TOFC help the UP provide its customers with fast, dependable service.

A BULKHEAD FLAT CAR is modified in the shop to carry a canvass cover for the protection of commodities such as wallboard during transit.

CN customizes cars in north country

In a small development shop at Edmonton, Alberta, the railroad re-tailors its equipment to meet special shipping requirements.

A MODEL OF A FLAT-CAR RACK is assembled by a workman at Canadian National's development shop in Edmonton, Alta.

Out in the "north country" of Alberta, Canadian National has a customizing car shop operation that specializes in developing individual answers to individual shipping problems for CN customers.

The small, tailor-made car service facility is under the jurisdiction of Dick O'Rourke, manager of customer research service for the railroad's mountain region. With the operation—a six-month-old development shop at Calder—railroad equipment is often literally hand-made to shipper's requirements.

• **An economical operation.** The Calder shop is the only one of its kind on the CN system. Each of the other regions across Canada has large overhaul shops where customer research projects can be undertaken. O'Rourke's shop, which occupies a building in CN's Calder yard, is neither elaborately equipped nor staffed. Its machines include such commonplace items as drill presses, bandsaws, and welding equipment. A foreman, an engineer-draftsman, and two mechanics are permanently on duty. Other help is called in as needed.

The biggest asset we have," says O'Rourke, "is ingenuity and an eye for economics."

In the past two years, the customer research service staff has worked with more than 100 firms in Alberta and British Columbia, tailoring equipment for some, and consulting with others on shipping techniques, loading to greater capacity, and packaging. The facility was set up because the road felt that customer demands for research help in the region had reached a point where a special shop was really needed.

O'Rourke says the chief function of his group is to advise industry of better ways to use existing transportation facilities.

The customizing of equipment, however, remains the most dramatic of their activities. One job assigned to the group, although begun elsewhere, was finished at Calder Yard in its own shop there.

The task was to transform outdated automobile transporter cars into high-capacity, double-deck cattle cars. The prototype was begun in Montreal before the Edmonton development shop came into being. Shipping tests were commenced last fall.

"There were a few bugs in our design," O'Rourke says. "As soon as we and the shippers had pinpointed them under working conditions, we moved the double-decker into our shop. It was the first job we tackled there."

Another series of shipping tests followed. Three weeks ago the finished product rolled out of the shop. ■

Pennsy urges 'go' on passenger tests

Chairman Saunders wants passage of a bill to give the green light to LBJ's program. Other endorsers: the RPI, ICC, and RLEA.

The most interested railroad—the Pennsylvania—the railway supply industry, the ICC, and the Railway Labor Executives' Association last week urged Congressional clearance of President Johnson's program for Department-of-Commerce studies to develop high-speed railroad passenger services. Their endorsements were among several favorable presentations made at hearings before the Senate Commerce Committee's surface transportation subcommittee.

PRR was represented by its chairman, Stuart T. Saunders, who said that road is prepared to invest as much on the proposed New York-Washington demonstration as the federal government is planning to spend, i.e., $9 million to $10 million. The supply industry's spokesman was Richard L. Lich, vice-president of General Steel Industries, who appeared in his role of chairman of Railway Progress Institute's committee on passenger traffic.

● **ICC favors objectives.** Speaking for the ICC, its chairman, Commissioner Charles A. Webb, said the Commission favors the general objectives of the President's program. Since the program would be administered by the Department of Commerce, Webb offered no comment as to the adequacy or reasonableness of the bill before the subcommittee, which is headed by Senator Frank J. Lausche (D.-Ohio).

The bill is S. 1588, which would authorize the program. Authorizing legislation is a prerequisite to the obtaining of appropriations to finance the program. The President's budget message of last January proposes an apportion of $20 million for the next fiscal year beginning July 1. Secretary of Commerce John T. Connor has said that the program, as now projected, would require an additional $70 million—$35 million in each of the two subsequent fiscal years.

Connor first gave these estimates in supporting the House's authorization bill, H.R. 5863, in his recent presentation before the subcommittee on transportation and aeronautics of the House Committee on Interstate and Foreign Commerce (RA, May 31, p. 8, and June 7, p. 34). The Secretary of Commerce was also lead-off witness last week before the Senate subcommittee, and he made pretty much the same presentation there.

Subcommittee Chairman Lausche, who has been critical of commuter-aid programs administered by the Housing and Home Finance Agency, told Connor he favors Commerce's program. Lausche said this after being assured by the Secretary that the Administration was not driving a wedge to bring about government operation of railroads. Further assurances on this score came when Connor agreed with suggestions that the bill could be tightened in parts which might be interpreted as permitting government operation.

Lausche also spoke of the burden of state taxes on the railroads. He was referring to discriminatory assessment policies, which apply a higher tax base to railroad property than to business property generally. He said it's essential that something be done about this.

● **PRR ready to go.** The Johnson administration has emphasized the national scope of the program, which includes research and statistics-gathering phases as well as the Northeast Corridor demonstrations. First of the demonstrations will be on PRR's New York-Washington line. Later, there will be one on the New Haven's Boston-Providence line. Saunders has the same general view of the program.

A far-reaching test

"The Northeast Corridor project," he said, "will be more than a testing ground to provide solutions to the pressing transportation problems that beset one large and heavily populated complex of metropolitan areas. Its usefulness will extend far beyond the immediate territory concerned, for it will afford invaluable data and exeprience that will ultimately benefit every major section of the country."

PRR's spending for the demonstration project will be to upgrade its roadbed and other fixed facilities. It will also participate with the government in the acquisition of up to 50 self-propelled cars. "This is not money we would spend in any event, but funds specifically required to support the federal program," Saunders pointed out.

● **Proposed service.** The PRR Chairman also said that the new cars will be the "finest passenger equipment in the world," operating speeds up to at least 150 mph. This speed is expected to be reached between Trenton, N.J., and New Brunswick. The hope is to get time on the 226-mile New York-Washington run down to three hours, perhaps 2½ hours.

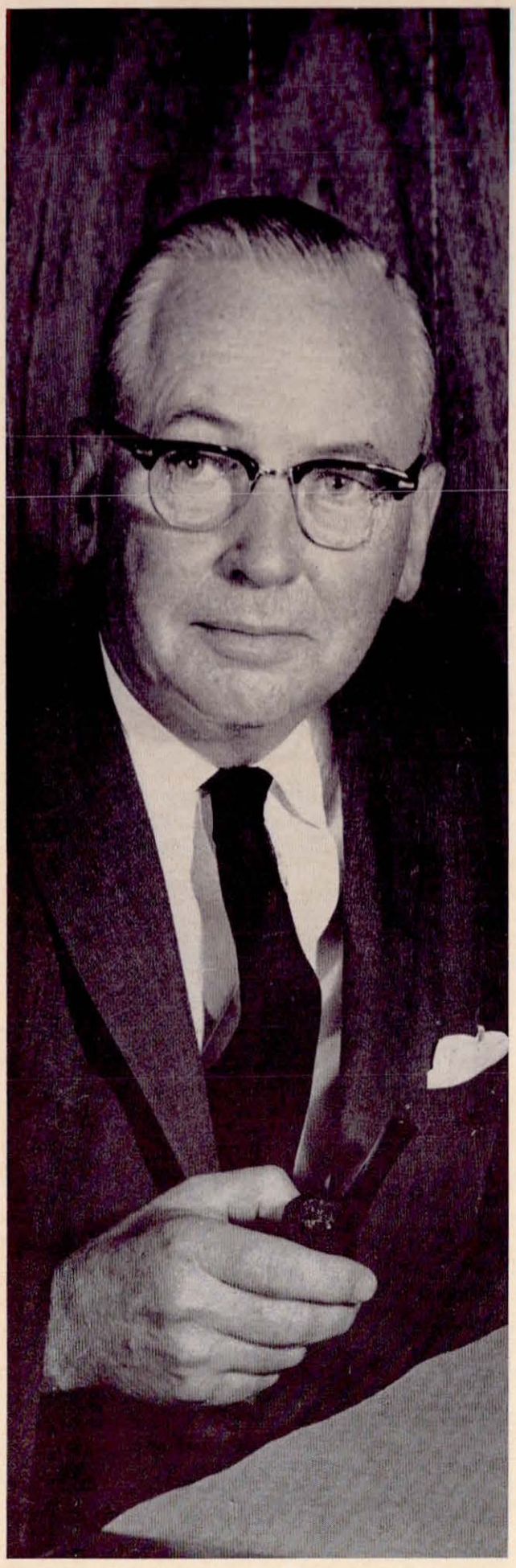
Present plans call for the new trains to operate alternately with conventional trains running between New York and Washington. The number of daily trains on that run will be increased from the current 50 to 70 to provide hourly service. Between Philadelphia and New York, there will be half hourly service from 7 a.m. to 12:15 a.m. PRR will also cooperate with the government by adjusting speeds, schedules and fares, and by assisting in the collection and analysis of statistical information, Saunders also said.

Responding to questions from members of the subcommittee, he predicted that the proposed experiment would be a success. PRR, he explained, thinks the future of railroad passenger business may lie in good service for relatively short hauls in congested areas like the Northeast Corridor.

● **Supply industry ready.** RPI's Lich told the subcommittee that the supply industry "stands ready with the technology and capability available today to provide the necessary advanced equipment and facilities" for the proposed demonstrations. He pointed out that the growing market for commuter-service equipment in recent years has resulted in major advances in passenger comfort, equipment aesthetics and in the design and performance of all equipment components.

Meanwhile, Lich suggested that undue emphasis should not be placed on the development "of some, as yet unknown and unproven, system at the expense of developing the full capability of existing railroad systems." There he had in mind Commerce's plans to look into such things as tubularcarriers and wheelless surface transportation systems of the air-suspension variety. A like warning was sounded by Robert E. Kirby, vice president of Westinghouse Electric Corporation, who also supported the bill.

The RLEA presentation was made by its executive secretary-treasurer, Donald S. Beattie. While endorsing the bill, he suggested an amendment to include labor protection conditions like those in the law providing federal aid for mass transit. ■



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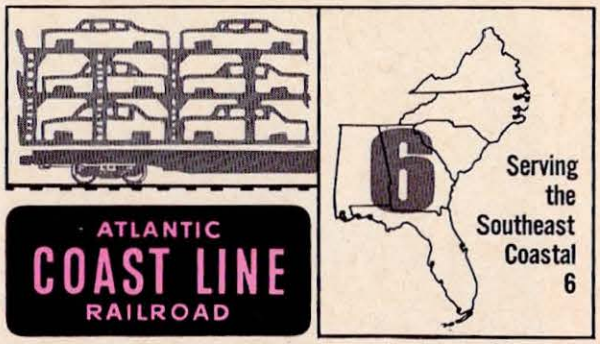

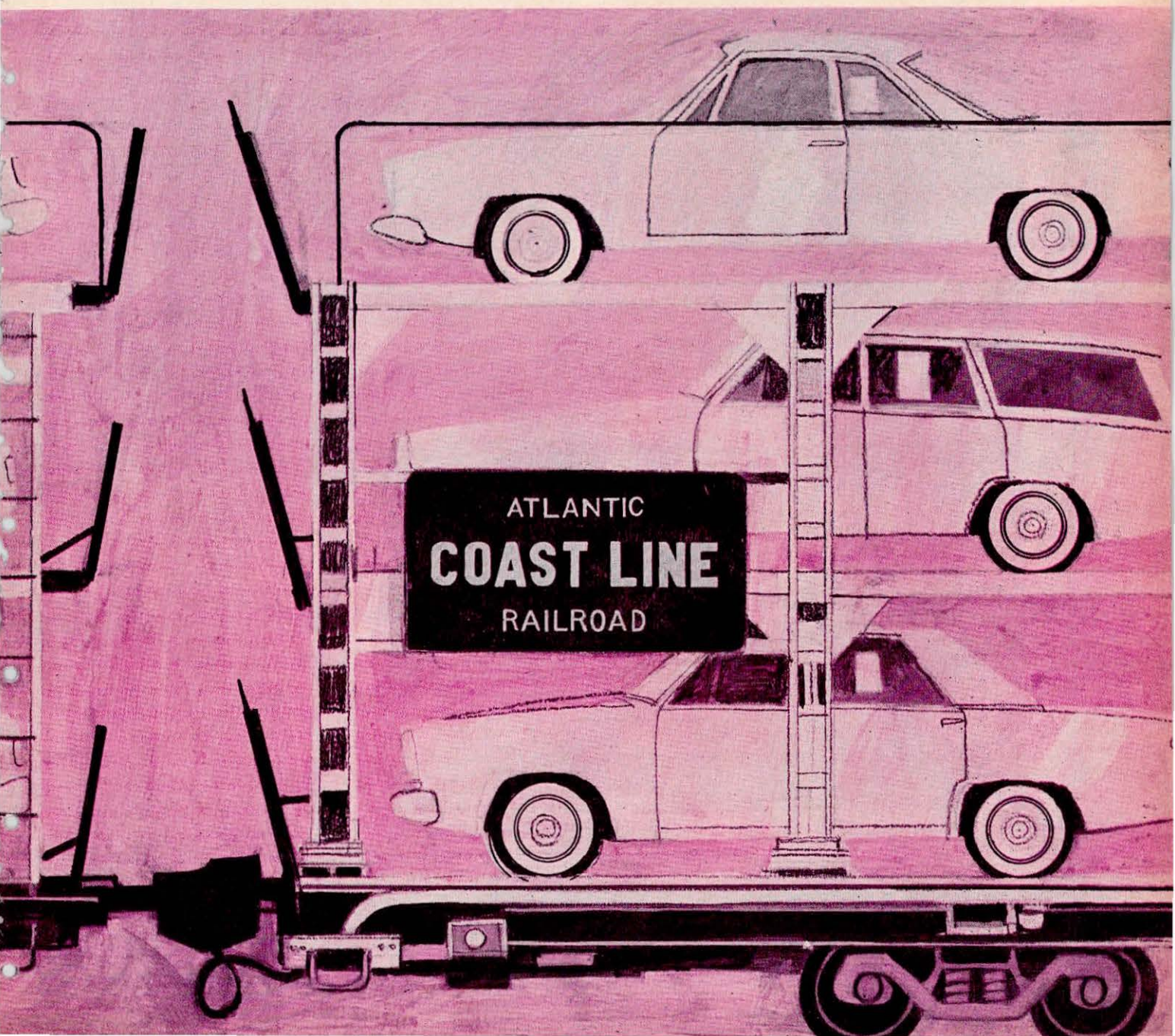

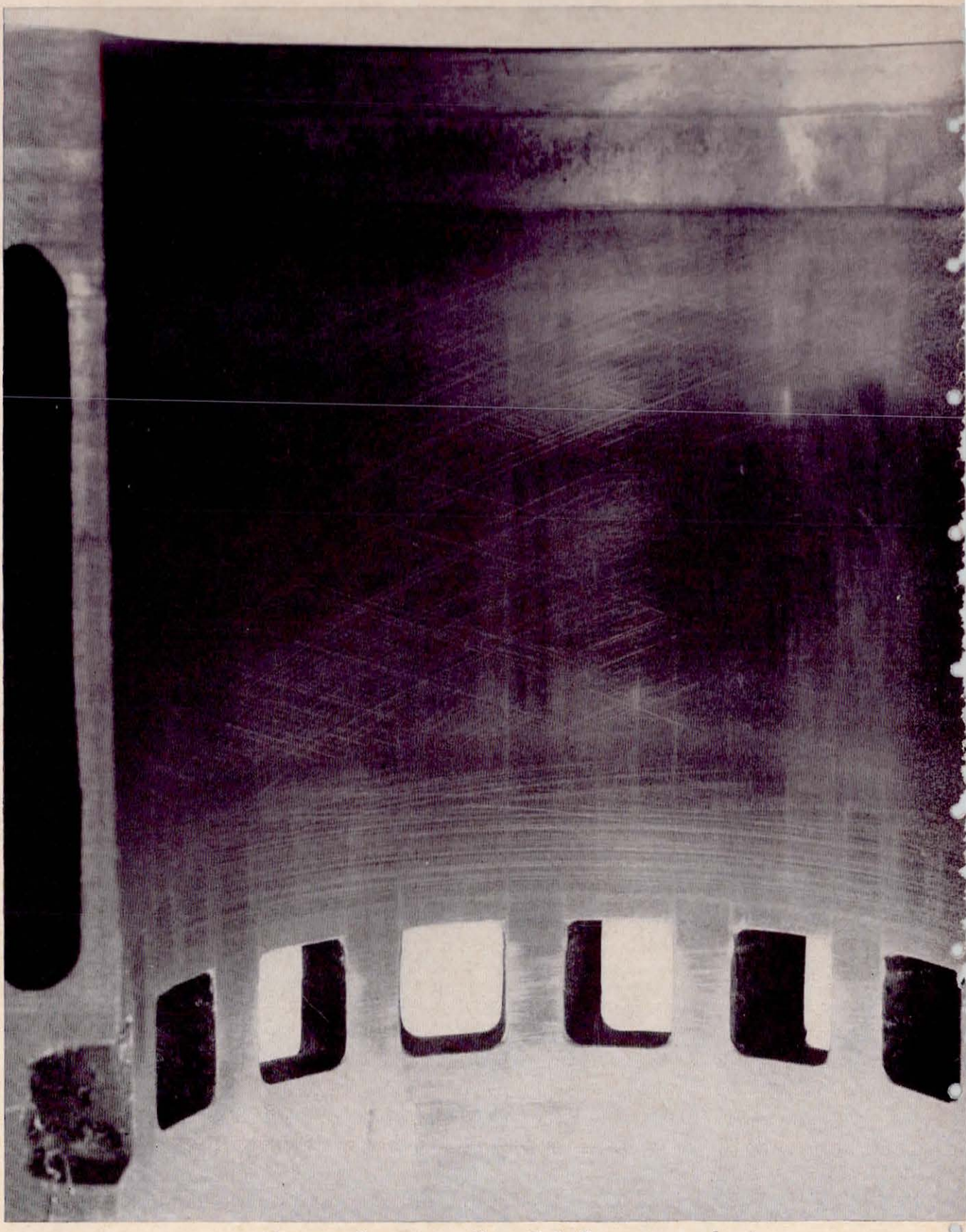

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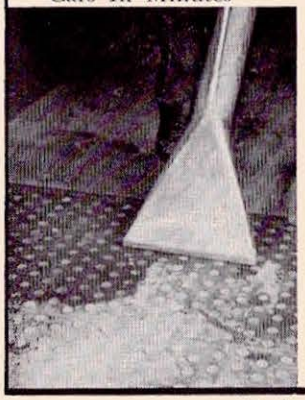

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(Product Reference 53B)

More freedom for Canadian transport?

CP's Sinclair believes the transportation industry could show greater efficiency if competitive 'distortions' were removed.

"The high degree of efficiency which characterizes the Canadian transportation industry today is impressive testimony to the benefits which flow from intensive competition," Canadian Pacific Vice President Ian D. Sinclair told Canadian manufacturers.

But, he added, "if certain distortions to competition, which have been allowed to persist, were removed, even greater efficiency and economy in the distribution of the nation's goods could be achieved."

Sinclair, and CP President and Chief Operating Officer, R. A. Emerson, were on the program of the 94th annual general meeting of the Canadian Manufacturers' Association in Toronto earlier this month.

● **The MacPherson Commission.** Sinclair said the MacPherson Royal Commission, the governmental group that has been studying Canadian transportation, "found that serious distortions do exist in the natural allocation of the country's transportation resources.

"It found that if the railways are to adapt quickly to the extreme competition within the transportation industry, they must either be relieved of certain public obligations which have no place in today's highly competitive transportation industry, or be adequately compensated for these obligations."

Among the Commission's recommendations for the elimination of competitive distortions was one stating that regulation of transportation agencies, under present competitive conditions, should be reduced to a minimum. Also, that those regulations that are retained, should apply equitably to all competing carriers.

"The emphasis the Commission placed on competition as the most efficient means of allocating the nation's traffic between competing carriers was, in my opinion, the most important of its recommendations," Sinclair told his audience.

He said that the Commission, in summing up its findings on distortions to competition, "stated that the railways to survive as an active component of the transportation industry must meet transportation service of alternative carriers by price and service."

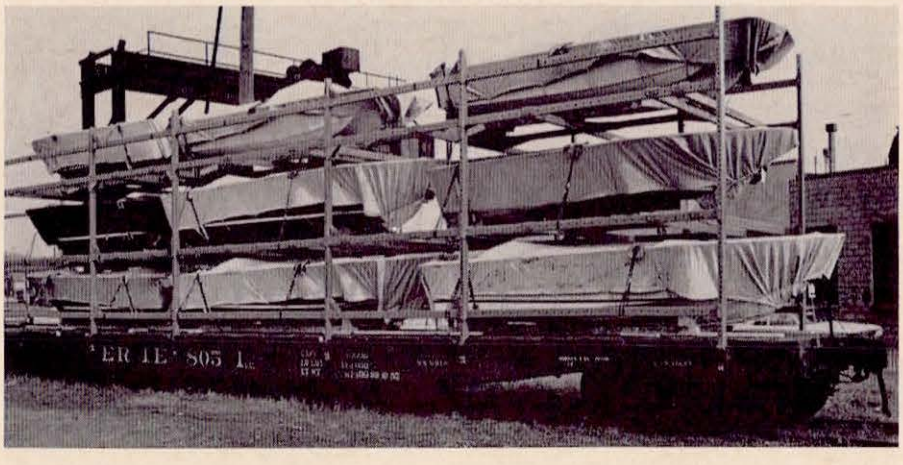
He pointed out that this is only possible where "national obligations" do not distort their ability to do so.

"Insofar as they can be described, these national obligations should be removed in the long run by adjustments to plant and service. Where these national obligations cannot be removed, remuneration should be found for the services performed to prevent distortions in resource allocation and distortions in the pricing of rail service."

The MacPherson Commission has recommended that, where for reasons of national policy the railroads are required to provide unprofitable passenger and low density branch line services, they should be compensated for deficits incurred. Also, no single form of transportation should be singled out as an instrument of national policy to provide unremunerative services unless adequate compensation is provided.

"Efficient transportation is essential for the attainment of Canada's economic goals," Sinclair declared. "It is essential to the prosperity of every Canadian business. It is abundantly clear from any objective appraisal that competition in all facets of transportation has raised standards of service and introduced cost saving adjustments in equipment, work force assignments as well as in other fields.

"Effective competition can only apply, however, if the public, led by the business sector, is prepared to take a position against anomalies in the transportation industry which dull or remove the spur of competition. We find these anomalies in special legislation affecting the cost of capital, the provision of essential facilities at uneconomic user charges to trucks, to ships and to aircraft and the continuation of outmoded regulatory practices." ■



Boat builder moves a fleet by rack cars

Automobiles are riding railroad rack cars in increasing numbers, and now boats are taking to the same rails before taking to the water.

One company that found rail rack-car service ideal for the shipment of its boats is Thompson Boats of Cortland, N.Y.

For some time now, Thompson has been shipping its Thompson and Corsair pleasure craft from its eastern plant in New York to West Coast destinations.

The boat builder had its adaptable racks developed by the Equipment Manufacturing Co. of Detroit, using cars provided by Northern Pacific. The racks have been attached to Erie Lackawanna cars that now serve the company.

Thompson says the system has permitted the company to reduce shipping costs per boat and to give better service to dealers. ■

RRs need closer ties to science

Greater involvement by the industry in scientific development would offer many rewards.

W. ARTHUR GROTZ

W. ARTHUR GROTZ
President, Western Maryland

Railroads are products of applied science. This truism is evident in their track, motive power, fuel, communications and everything they do. Indeed, railroads led the applied science parade for nearly a century. Railroad bonds were the prime investment medium and capital was readily available to this growth industry.

So it was until the sweeping growth after World War I of individualized transportation of people and goods—an interplay now of the private initiative of manufacturers and the almost limitless public financing of roads. The effects of highway traffic upon their earnings soon began to restrict the railroads in financing improvements. Thus, while railroads continued to advance with science, their retarded pace left them farther and farther behind the leaders in the new growth industries.

Happily, the last ten years have seen a revival of railroad activity in applying science. Innovations, however limited, have met enthusiastic reception from shippers and investors. I firmly believe that more must be done.

Certainly railroads do not need new basic research. They do need (1) increased awareness of relevant science and (2) advanced engineering, in order to apply what has been discovered to railroading. Billions upon billions of dollars are spent annually by others pushing back the frontiers of knowledge. Some of the "fallout" from such vast research would be highly relevant to transportation.

If earlier application is to be given science, the large railroads must, of course, play the leading roles. They must consider whether opportunities for greater profit lie in this direction, the reasonable scope of efforts, and whether any part of the subject lends itself better to a joint effort than to individual effort.

Basic to any consideration is a definition of its objective. Such a definition in this case might be the following: "(1) to determine whether a program to assemble and apply scientific discoveries for the purpose of increasing the share of transportation handled by railroads and its profitability makes sense and, if so, (2) to lay a basis for such a program."

Meeting that objective would require, first, a long-range commitment to science, second, certain internal steps, namely, (1) to create the environment, the challenges and the incentives to attract and keep highly talented men, and (2) to upgrade existing personnel through continuous educational programs. It is time to stop the "spoofing" Ph. Ds have had at the hands of "practical" men. If we earnestly wish to recognize, understand and apply increasingly complex science, we will even need post doctoral education, in such areas as electronics.

Moreover, meeting such an objective would require a staff, either joint or on individual railroads. The staff would explore in depth, and project, long-range transportation requirements, in such terms as speed and load characteristics, as well as engineering and capital requirements, in a way similar to projections of the technical planning group of the General Electric Company at Santa Barbara, California. (It must be recognized that increased application of science would be of long run advantage, that significant gains cannot be expected in a year or two.) The staff would also provide for discovering, assembling, digesting and circulating pertinent scientific knowledge. It would recommend research, if some area of insufficient useful knowledge were uncovered.

While we are not talking about much money, such a program will not get off the ground except by executive conviction that greater involvement in science will really pay. As a means of exploring informally the opportunities and the pitfalls of greater joint or individual science application, I suggest a small conference between top railroad executives and executives of several large science-oriented industries, men as concerned with profits as we are. The conference would deal only with feasibility, whether we would be wasting time and money, as well as the time and expenditure required to recruit a limited staff and to get it moving, and the kind of man to head it. Recommendation of further steps, if any, would flow from consideration by the railroad executives of the problem in the light of ideas developed in the conference.

Getting such a program off the ground also requires a sense of urgency. The urgency, I submit, lies in the achievements of our competitors, aided by government, as in super highways, double bottoms and jet cargo planes, and in our own costs, as in labor, train accidents and utilization of capital invested in rolling stock and plant.

Of course, with the winds of change swirling around us, railroad executives have, of necessity, made decisions with less than complete scientific background on such things as much larger cars, new means of communication, new materials, tools and computers.

Admittedly, an accelerated acceptance of science may bring earlier obsolescences, a more rapid turnover of capital. Such is the cost of progress, as were expenditures for our diesels and aviation's jets. If the predicted result of commitment to science were a greater share of transportation and greater profits, we would not only be repaid but the image of railroad progress would be brightened. Investors are searching for situations with real evidences of vision and growth.

Finally, the awakening public interest in railroad science cannot be overlooked. It is evident in the White House and in the halls of Congress, along Constitution Avenue and in the Pentagon, as well as at state and local levels. Government has enormously aided the development of aircraft; it is now embarking modestly on railroad development. Fanning this interest might well result in grants-in-aid for translating science to forms and prototypes useful in providing better railroad service to America's dynamic population and industries. ■

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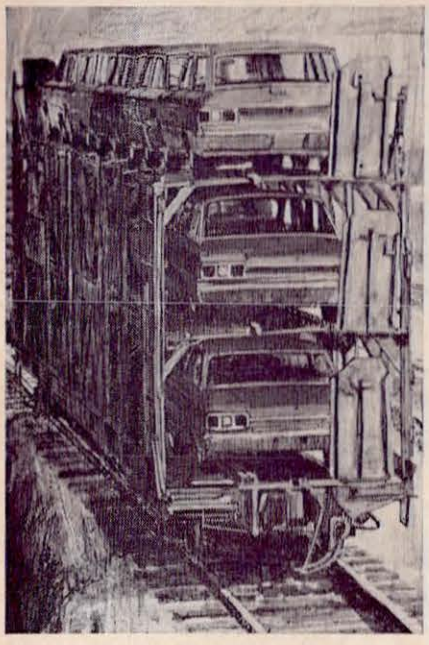

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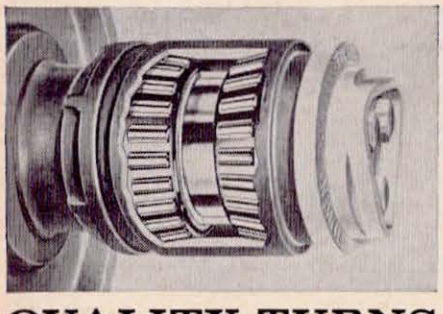

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New SP line improves service at low cost

Railroad improvement projects do not have to be large to accomplish substantial and multiple benefits. The truth of this statement is underscored by a project now being brought to completion on the Southern Pacific in southern Arizona.

The major improvement involved is the construction of 7.5 miles of new line. This new construction permitted the railroad:

—To shorten the distance between Tucson and Phoenix by one and one-third miles.

—To abandon 15 miles of line.

—To offer substantially improved service to shippers.

Two lines of the SP are involved in the project. One is the main line between Phoenix and Tucson. The other is a branch line that extends from McQueen on the main line to Hayden. The new line extends from Poston on the main line northerly to a connection with the Hayden branch at Magma.

One outcome of the new construction is to incorporate into the main line that portion of the branch line between McQueen and Magma. Another is to permit abandonment of the 15 miles of main line between Poston and Dock. The section of old main line between McQueen and Dock is being kept in service as a branch line for freight service. Among other industries it will serve a new sugar beet refinery under construction at Serape.

● **Improvements in service.** With the new line now in service the railroad is able to provide overnight service for copper concentrates moving from mines in southern Arizona to smelters at Hayden. Formerly, the concentrates were hauled to Phoenix and thence back over the branch line to Hayden.

Movement of copper from the smelters to eastern points has also been speeded up. Further benefits will develop during the spring potato harvest along the Hayden branch. The potatoes will now move directly eastward instead of going to Mesa for main-line connections.

● **Welded rail used.** The initial step in the project was construction of the 7.5-mile line. Grading for the line was performed by Morrison-Knudsen Co., Inc. SP crews then moved in to construct the track which is laid with 113-lb rail welded into long strings. The procedure was first to lay the ties and to position the tie plates on them. The long rails, shipped to the site on a specially equipped train, were then dragged out onto the ties by a special tractor.

Rail for the new line was obtained from the abandoned "South Line" between Douglas, Ariz., and Anapra, N.M. Laid on this line in the early 1950's, the rail had carried little traffic and was in excellent condition for reuse. On being taken up the rail was shipped to Douglas for inspection, cleaning, cropping and welding into 1,440-foot lengths. From Douglas, the long lengths were shipped directly to the site of the new line for relaying.

● **Branch line upgraded.** Almost simultaneously while the new line was being built, other SP crews were busy rebuilding the former Hayden branch between McQueen and Magma. In upgrading the track to meet high-speed main-line standards, tie renewals were made as necessary and the old 75-lb rail was replaced with 113-lb continuous-welded rail. This also was rail salvaged from the former "South Line." A new siding was constructed about midway of the line, and new storage tracks and sidings were built at Magma.

Both the new line and the upgraded portion of the former branch line are equipped for 79-mph operation for passenger trains and 60-mph operation for freight trains. Both sections of line have been equipped with searchlight-type signals spaced about two miles apart.

Grade crossings are protected with automatic flasher signals and crossing gates where necessary.

The abandoned line is being completely dismantled. The rail is being taken up and shipped to Douglas for welding into long lengths. Usable ties are being salvaged; others are sold locally to ranchers.

The significance of this project is two-fold. First, it shows that wise planning can produce significant benefits without huge capital expenditures. Second, it proves that even a small line change, strategically placed, can produce service improvements while reducing costs. ■

Now a choice in pipe fittings that eliminate air line leaks

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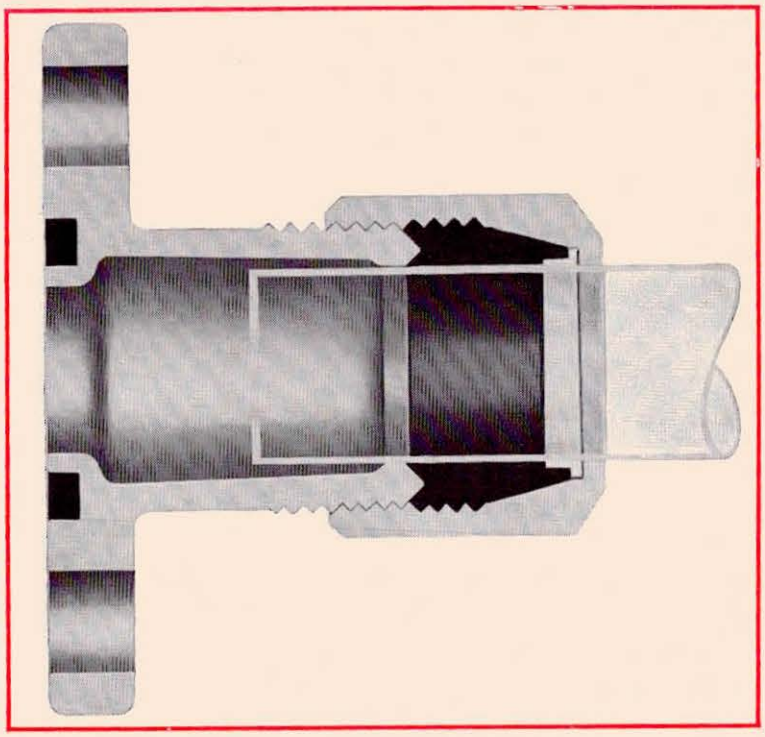
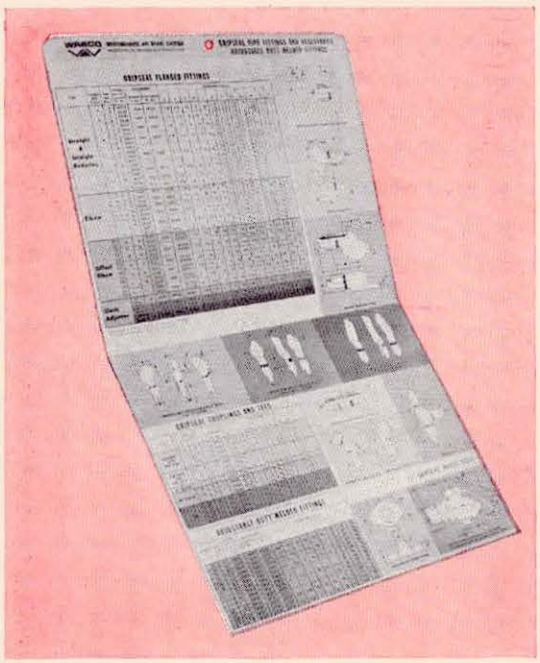
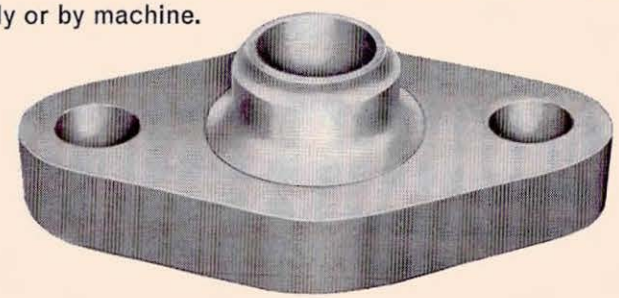
stop air leaks and retain air pressure summer and winter. GRIPSEAL Fittings overcome the troublesome problem of connecting misaligned pipe or slightly short pipe. Even pipe broken at the threaded section can be sealed airtight with GRIPSEAL Fittings. They are interchangeable with WABCOTITE® Fittings and WABCOSEAL® Fittings. "White Mark" rubber compression rings won't stick to the nut—they remain leakproof even under extreme temperatures of —50 to +200°F. Selections of GRIPSEAL Flanged Pipe Fittings are available in pipe sizes from ½" to 2". Replacement compression rings are split so no dismantling of pipe is necessary. Just back off the nut, remove the old ring and insert a new one, and tighten again for a positive seal.



Adjustable Butt-Welded Fittings. Where welded fittings are preferred, the new Adjustable Butt-Welded Fittings provide many advantages: • Permanent pipe connections • Reduced number of joints • Source of leakage eliminated • Can be welded manually or by machine.





Send for new fittings chart. All GRIPSEAL and butt-welded fittings and accessories are listed by a color code for easy identification. Contact your Westinghouse Air Brake Division Representative or write to the address below.

WABCO

WESTINGHOUSE AIR BRAKE DIVISION

WILMERDING, PA./Westinghouse Air Brake Company

TRAINING COURSES have an informal atmosphere when they're run by Director of Supervisory Training Verne C. White—who mixes training material with showmanship.

How Frisco improves its sales techniques

Modern sales managers, the road believes, are aware that the job of operating a railroad begins and ends with the customer.

Just about every railroad is giving more intensive training to salesmen and sales managers these days—but few roads have gone about the job with greater energy than Frisco.

Frisco's entire sales force has had four years of informal classroom training in sales skills—and, this year, there's a stronger-than-ever effort toward improving sales management.

One of the key elements in this campaign is a 55-page manual-for-managers, compiled by Director of Supervisory Training Verne C. White—who pulls few, if any, punches in his outline of what a sales manager should be doing, and why.

• **What is a 'manager'?** Frisco starts with the premise that management can be defined as "the task of planning, directing and controlling the efforts of others in the same organization to achieve or exceed desired objectives."

One of the problems that frequently arises, under this definition, is that sales managers may also sell—and when a manager is selling, he isn't managing. Many people in sales management, White points out, were given managerial jobs because they demonstrated ability as salesmen: "They got along well with people, they were cooperative, but they were so busy selling that they had no opportunity to study in depth the field of sales management. As a result, many managers manage by 'doing.' They enjoy using those skills in selling that earned for them their title as sales manager."

Almost any sales manager, White says, can talk the language of managing. The real test is understanding management well enough to practice it in meeting day-to-day responsibilities. Frisco puts it simply: "The effectiveness of our marketing program is dependent upon the sales manager's ability to get results through his salesmen. . . . He must effectively train, motivate and direct salesmen who, in turn, persuade customers to buy. Persuading customers is a challenging job, and the payoff for the salesman and his company. All too often, it offers such a challenge to the sales manager that he spends time selling—which he likes to do—instead of managing. When he is selling, he is only duplicating the efforts of his men. When he is managing, he multiplies his efforts many times, through his salesmen."

• **Review needed.** This emphasis on managers managing extends to sales supervision below the top level. Job content of subordinate managers, White notes, should be examined to make sure they have the time (and the ability) to exercise their authority and fulfill their responsibilities. And reports from lower levels to the top should not be regarded as merely informational: "They should be 'control reports,' which provide sales managers with a measure of the effectiveness of Frisco's sales effort in the territory and in the efficiency of the salesman involved."

Reports moving in the opposite direction—from the top down—could also stand improvement, as White sees it: "If the sales manager is to help increase company profits, he should know the profit contribution expected of his district or region and have a scorecard to tell him how he is doing. Salesmen and first-level sales managers, to become profit-conscious, must hear more than sales expense, budgets, carloads, ton-miles and sales performance from higher-level sales managers. Control reports concerning profits should be available to them."

Frisco, like most roads today, has definite ideas as to just exactly what its sales managers should be. Here's how White explains it: "It has been said that there are two types of managers—those who can't do what they are told and those who can. Neither is the type of manager needed on the Frisco. Certainly there is no room in the organization for the manager who can't do what he is told—but nor is there room for the man who can do only what he is told. Managers must have initiative. They must be creative. The difference between average and top managers can be explained in three words—'and then some'."

• **Yesterday — and today.** White goes on to point out that yesterday's sales manager "thought primarily of increasing his sales volume. He felt that his responsibilities ended when the sale was made. He assumed few, if any, responsibilities toward other departments. He was not concerned with sales forecasts. And he had little concern for the influence his work had upon maintaining regular employment for the rest of his company. But the modern sales manager realizes that his value to his company is not measured solely by his sales volume. He knows that he must make sales at a profit. He shows particular concern to the more profitable commodities. He seeks to maximize profit—but not at the price of unfair treatment of customers. He is mindful of the opinions of shippers. In short, he is an executive who is concerned for the good of his company and at the same time for the welfare of the men he supervises. And he realizes that the entire job of operating a railroad begins and ends with the customer."

To Frisco, a manager "is more than a problem-solver. He is a goal-setter. He does not wait for problems to come to him. He envisions the things that should happen and thinks through the paths by which his goals can be reached. He is not a fire-fighter who comes to the office each morning to see what problems arose which need settling—though, of course, he is there to help when problems do arise."

• **The danger signs.** One of the road's aims in emphasizing goals rather than problems is the prevention of man-

HOW DO REPLACEMENT PARTS MEASURE UP FOR YOUR CONTINUOUS RAIL WELDER?

No matter which continuous rail welding system you choose, there's one thing of which you can be certain . . . it won't stay new forever. It's going to need replacement parts.

That's when some people realize for the first time that foreign-made equipment means foreign-made parts, too. You don't just pick them up at any hardware store. And . . . if they're not immediately available, it can derail an entire project for weeks.

This is one of the reasons so many railroads choose the NCG Continuous Rail Welding System. It features the finest points of electronic flash-butt welding units developed in Western Europe, where welded rail is the rule, but is made entirely right here in the United States **to meet U. S. standards and requirements.**

As a result, smaller parts are available anywhere in the country . . . others can be rushed to you in a matter of hours. A telephone call is all it takes. Just think how this can reduce downtime . . . cut back the total cost of the job.

We'll be glad to give you complete information about this practical system and a cost-saving lease plan that includes all parts and service. Just phone 312-944-3100 or write the Railroad Equipment Department, NATIONAL CYLINDER GAS, Division of Chemetron Corporation, 840 North Michigan Avenue, Chicago, Illinois 60611.

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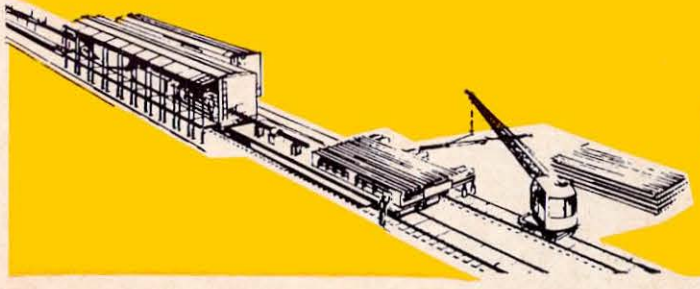


NCG®

NATIONAL CYLINDER GAS

RAILROAD EQUIPMENT DEPARTMENT

DIVISION OF CHEMETRON *CORPORATION*

Frisco makes sure its sales forces know what Frisco does—and one way is by running open-air specials like this one which gives salesmen a firsthand look at the railroad's operations. Inspection trips like this pay big dividends.

Seeing is believing—and it helps sales

Salesmen get a look at a big money-maker—Frisco auto-rack service, close-up.

agement stagnation—and managers are urged to take stock to make sure the signs of stagnation don't show up. Among the symptoms:

—Losing touch with modern trends in management.

—Feeling that the company is "entirely different."

—An unwillingness to experiment with new methods.

—Failure to look beyond present markets.

—Failure to reward merit or to take corrective action for poor performance.

—Lack of desire on the part of the manager or his staff for self-development.

—The attraction to the work force of passive and dependent people who are frightened by the boss and who seek security rather than opportunity.

—Indications that the staff is bored.

As Frisco puts it, "there are three levels of performance in people—the minimum they can get by with, the maximum their potential allows and their actual performance. The level in any given territory is determined largely by the ability of the sales manager to manage."

• **Sales control.** Frisco also spends considerable time on outlining firm theories of sales control. In practice, White points out, "sales control is somewhat different from quality control, but in principle they are the same. They involve keeping efforts within desired channels, motivating and restraining so that achievements are realized.

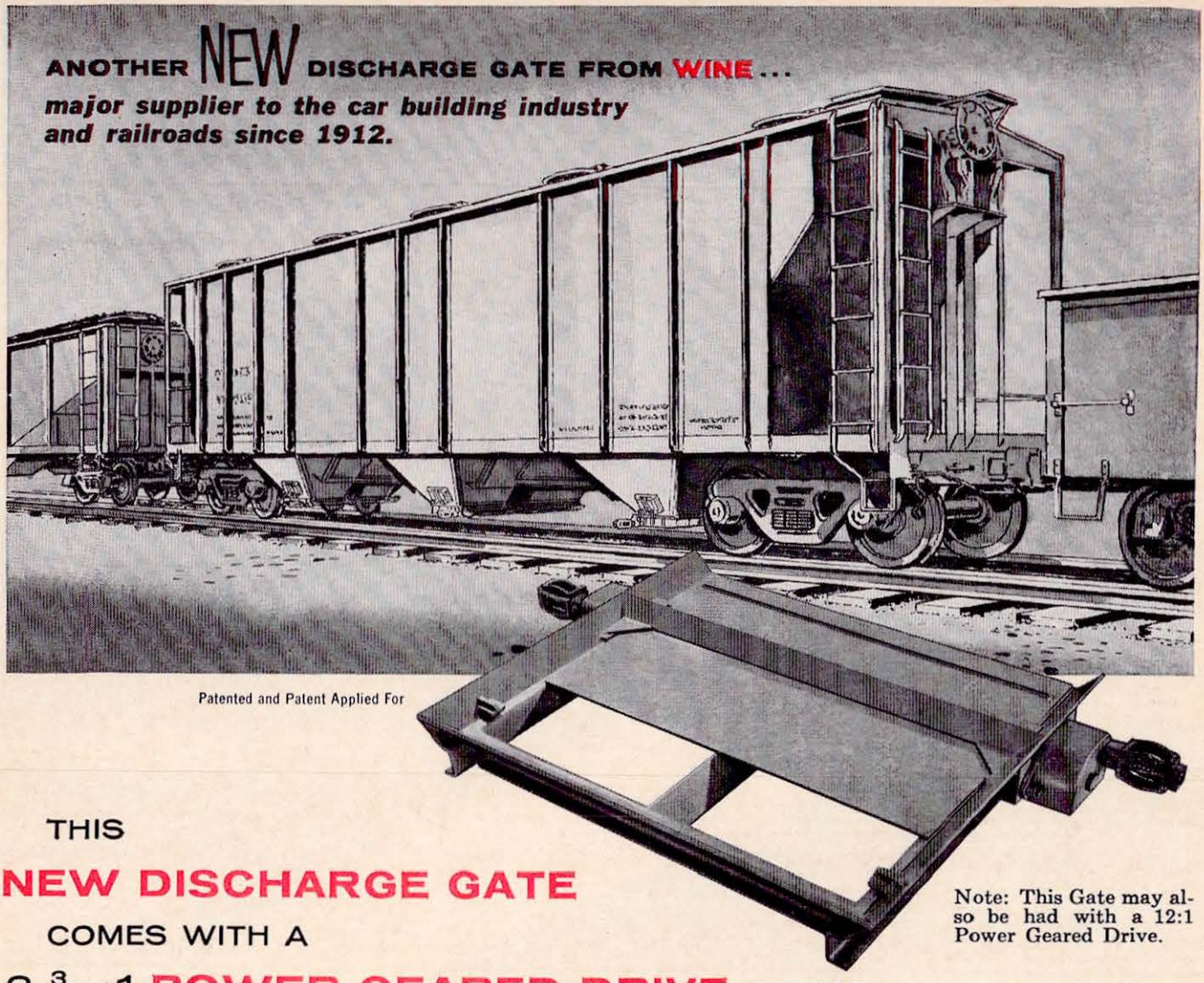
"Too little supervision of salesmen results in their becoming ambassadors-at-large. Supervising too closely destroys initiative and creativeness. They must not be 'snoopervised' nor allowed complete freedom, but guided, motivated, led, restrained, informed, coached, counseled, directed, controlled. The answer lies in a well-thought-out, well-balanced program for establishing and maintaining a continuous working relationship with the sales force. Feedback is required. One cannot assume that salesmen understand because they've been told, or that they perform to the best of their ability in the field because they are conversant with the steps of successful selling."

• **How judge a salesman?** Sooner or later, for managers, comes the job of evaluation of sales performance. Frisco concedes that evaluation "is a task most sales managers prefer not to do. At best, it is difficult to make a realistic evaluation because of the variables involved. . . . Regardless, the manager's primary responsibility is that of correcting sub-standard performance. Without careful evaluation, specific

(Continued on page 65)

ANOTHER NEW DISCHARGE GATE FROM WINE...

major supplier to the car building industry and railroads since 1912.



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NEW DISCHARGE GATE

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3 3/10 :1 POWER GEARED DRIVE RATIO!

Note: This Gate may also be had with a 12:1 Power Geared Drive.

OPENING: Approximately 25" x 48".

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OPERATION: Extra easy and convenient. Operator works whichever side is most convenient; opening capstans are on either side of frame.

CONSTRUCTION: Gears for drive mechanism are completely machined; precision steel castings; fabricated steel frame.

APPLICATION: Comes assembled ready for welding *or* bolting, as specified. As with other Wine Gates, you just position and attach. No fitting is necessary. No extra parts are needed.

OTHER SIZES, TYPES: Wine is prepared to supply any type and size (direct drive or power geared) Discharge Gate to individual customer needs, including the popular 13" x 24", 13" x 42", 24" x 30" and 25" x 48" sizes. For special conditions and commodities, all Gates can also be furnished hot dip galvanized or nickel-plated. The Power Drive Mechanism is adaptable to any car. For details on newest Power Geared Discharge Gate (3 3/10:1 ratio), see your local Wine sales representative or write the factory.

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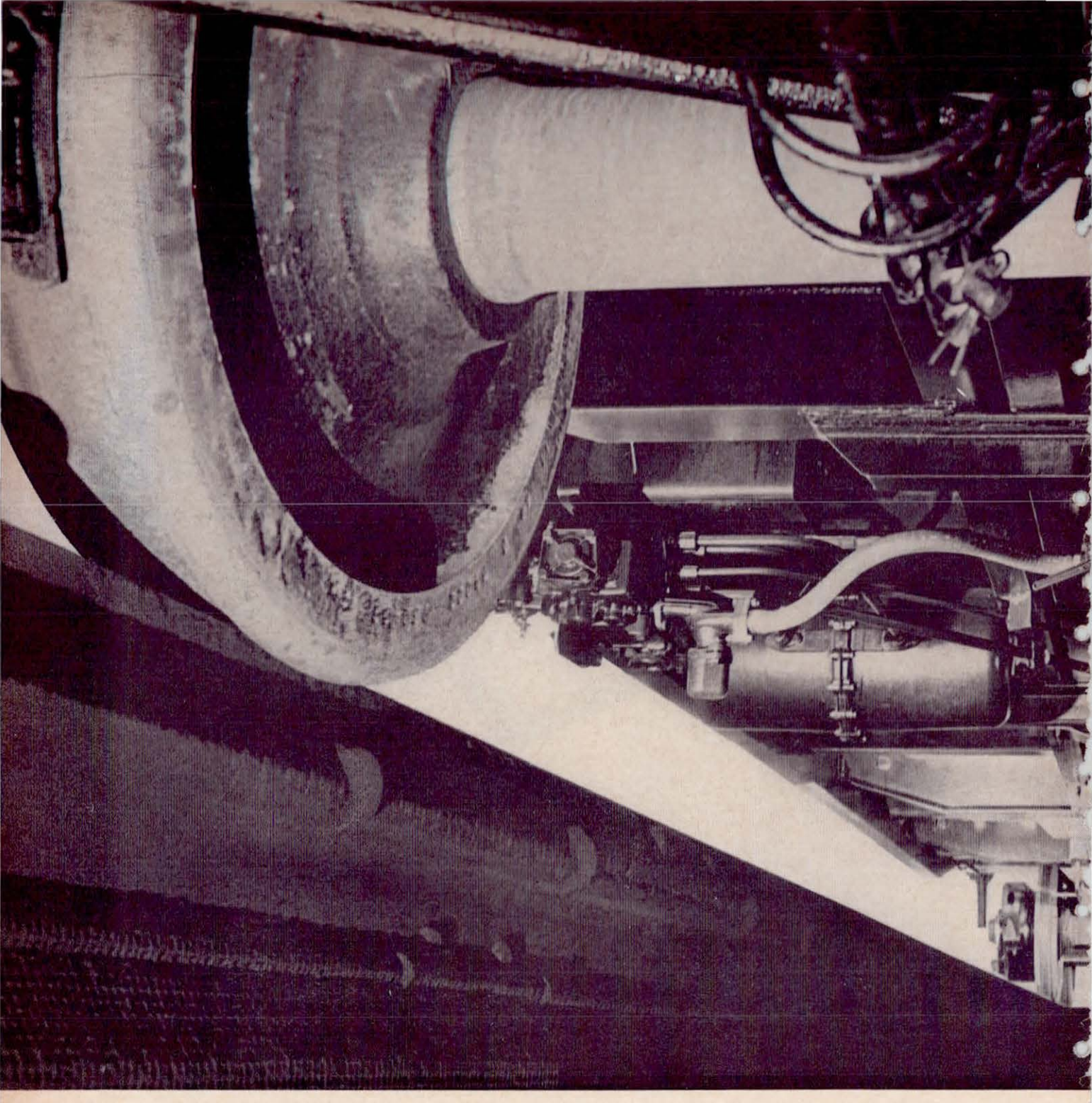


New ACF Precision Design Boxcar puts strength where you need it, yet cuts weight up to 3 tons

The ACF Precision Design Boxcar is a major advance in railroad car construction. It's a concept already proven in service with 7,000 boxcars on 25 railroads.

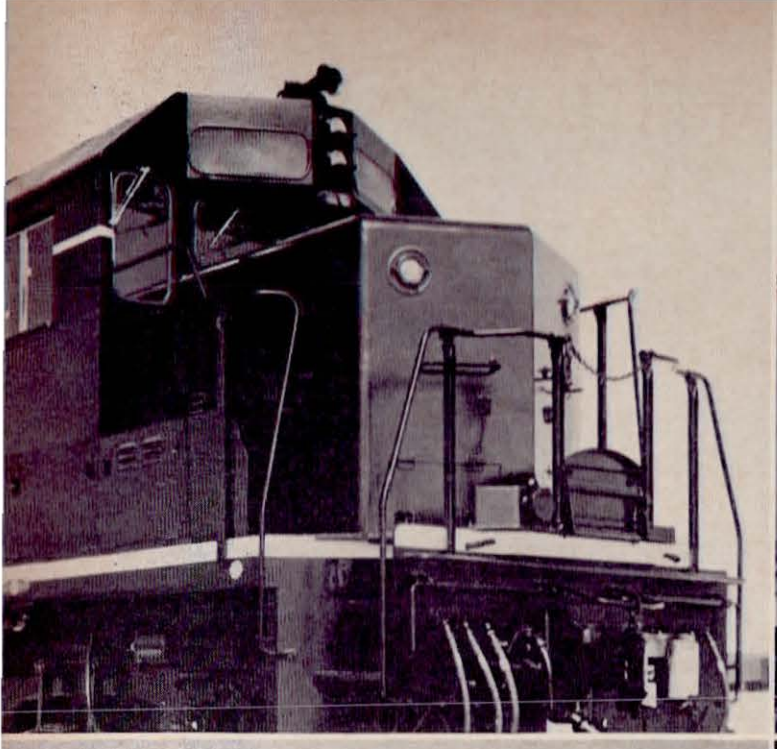
The Precision Design Boxcar is tailored to your traffic needs. It's built from matched, pretested components. Each is rated for the load it carries. Your car is never over-designed or under-designed.

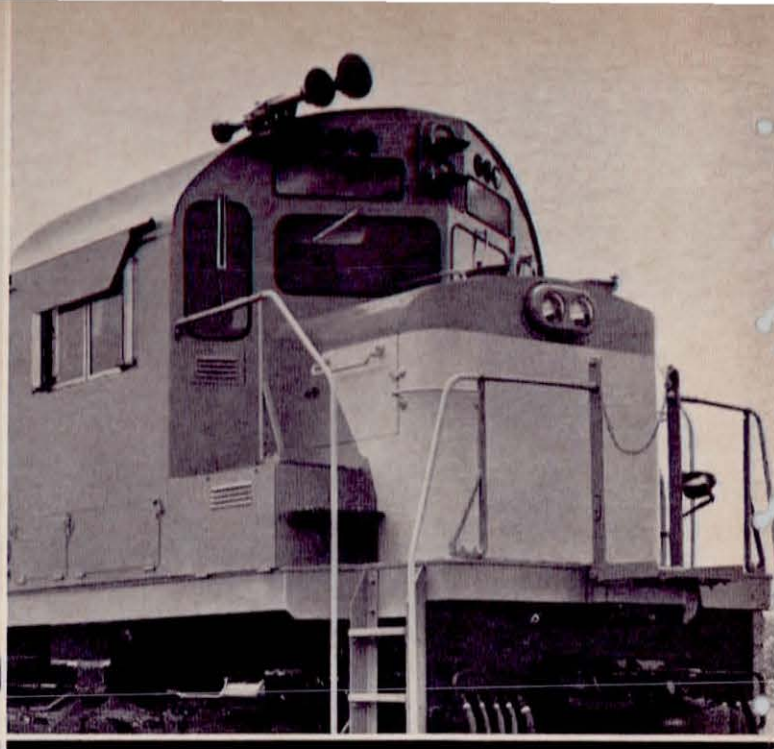
ACF's use of stronger materials and precision design reduces weight 2,000 to 6,000 lbs. without sacrificing strength. Provides bigger payloads, cuts maintenance.

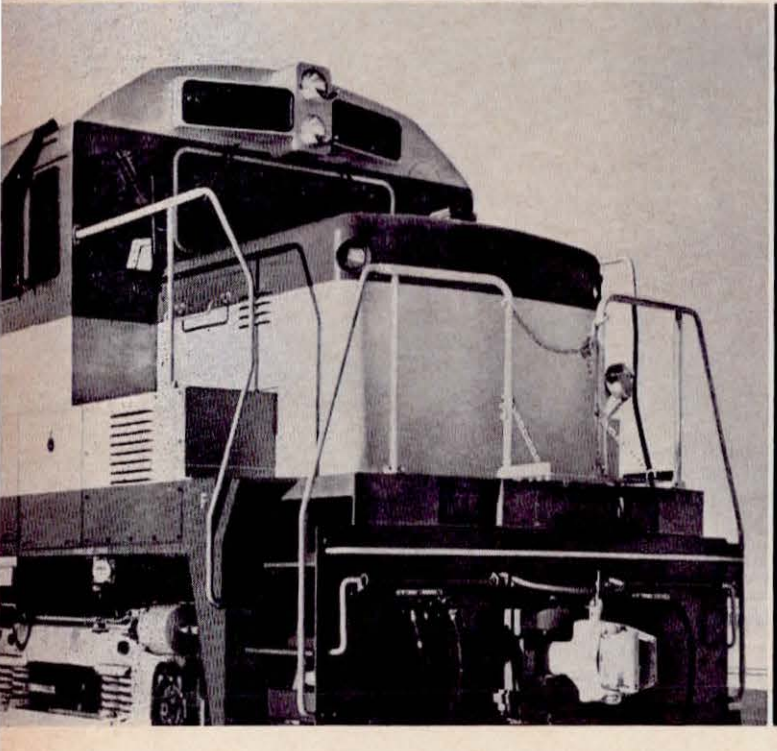
You choose 50-ft. or 60-ft. boxcars, fork lift truck loads from 12,000 lbs. to 60,000 lbs., interior equipment, load-restraining devices. You even select from more than 50 combinations of different door sizes and locations.

Have your ACF representative explain all the profitable advantages that ACF Precision Design Boxcars offer you. Call or write American Car & Foundry Division, ACF Industries, Incorporated, 110 Clark Street, St. Charles, Missouri 63301, or our sales offices in New York, Chicago, Cleveland, St. Louis, San Francisco, Washington, D.C.

acf ACF INDUSTRIES



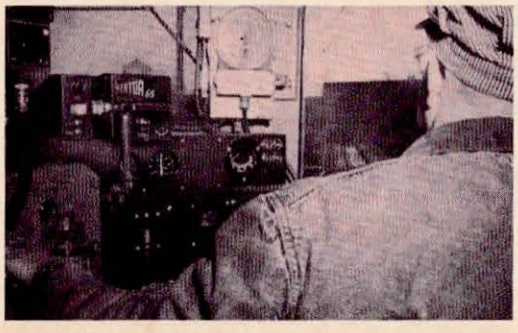




MOST LOCOMOTIVES ON ORDER TODAY CARRY ALERTOR 65 IN THEIR SPECIFICATIONS!

These are locomotives of all types. . . . Alertor protection goes **far** beyond the initial dead man control concept. During the in-service life of each locomotive the Alertor will cost about $16.65 per year, over a 15-year period—and for that small investment will provide protection against property damage, liability, collision or any other hazard caused by a lapse of alertness of the engineer. Over the full 15-year depreciated life of the locomotive the Alertor 65 keeps it out of these troubles every moment it is in service.

The Alertor 65 is your safest protection! No Alertor has permitted locomotive difficulties caused by a lapse in the engineer's alertness. Specify "Alertor 65" on all your new power.



VAPOR ELECTRONIC ALERTNESS CONTROL • BE ALERTOR® SAFE • THE SAFE DEAD MAN CONTROL • ALERTOR 65

Ask for Bulletin 4094-A

VAPOR®

VAPOR CORPORATION

Railway Exchange Building
Chicago, Illinois 60604
Offices in Principal Cities

(Continued from page 60)
areas of weakness may go unrecognized—and promotions cannot be made with assurance that the right man has been chosen for the management level."

Frisco has both quantitative and qualitative standards. Among the quantitative factors:

—Dollars Frisco has earned from a salesman's territory this year compared with last year.

—Carloads from the territory, on a year-to-year comparison.

—Carloads compared with revenues.

—Sales expense compared with revenue dollars.

—Number of calls per customer in a year.

—Ratio of calls to revenue and-or carloads.

—Number of new customers.

—Number of accounts lost.

● **A check on potential.** These factors are measures of sales ability, Frisco believes—but the qualitative factors are also measures of a man's managerial potential. On the list:

—Knowledge of the company and the services it offers.

—Ability to plan and organize work and to use time wisely.

—Thoroughness and accuracy of reports.

—Relationships with other employees of the company.

—Initiative and creativeness.

—Interest in the job and attitudes toward the work.

—Judgment and common sense.

—Personal appearance and personal financial affairs.

Regardless of what system of appraisal is used—and White tends to agree that no system is foolproof—there are certain principles to be followed:

First, most men want to do the best job they are capable of doing. They want to improve. They want to know where they stand. They want to know how their manager views their performance and what can be done to improve it.

Second, most people are not doing the best they are capable of doing. Given encouragement they can accomplish more than they are now doing.

Third, development and advancement are best approached by helping the salesman to do his present job better.

Fourth, development must be tailored to the individual's needs.

Finally, "all development is self-development. Management can help to identify and eliminate the barriers to development and to provide a challenge. The sales manager should encourage his people to help themselves. The rest is up to the salesman." ■

RAILROADING AFTER HOURS WITH JIM LYNE

LYNE

MIDDLE CAR MISSING—That story about a car in the middle of a train being derailed—and not being missed until the train reached its terminal (RA, May 31, p. 85) can be given "considerable credence." So writes President H. Weldon McGee of the Green Bay & Western.

It was a dark and stormy night in 1956. An automobile struck an empty hopper in about the middle of the train. "The hopper derailed and bounded on the ties until it completely cleared the track and landed in the ditch near the right-of-way fence." The air brakes stopped the train. The head brakeman walked back and the conductor forward, both men appraising the situation as one of a simple case of the train's having parted. So they coupled up and proceeded. At Green Bay, the switch foreman reported to the yard office that the conductor had listed a hopper car which was not in the train.

From Philadelphia, H. L. Luiggi reports that a wreck-master at East Altoona had told him of a similar incident in his bailiwick. The train was descending a steep grade, with its brakes partially applied and retainers set up, and lost a middle car. Perhaps some leakage in the train line prevented the brakes from acting normally. Anyhow, the loss of the car was not noted until the train reached its terminal.

CARTOONIST NEEDED?—The most apt characterization I have seen yet of existing governmental transportation policies is that by AAR's Daniel P. Loomis (RA, May 24, p. 15). What he said was that these policies resemble "a gold-plated automobile with five wheels, all of unequal sizes, and as many separate driving positions." It is certain that no two modes are treated exactly (or even approximately) alike, and that programs are lined up for one mode with no consideration of the effect on other modes, or on over-all transportation efficiency.

Isn't this a situation that a clever cartoonist could clarify? In my amateur way, I have thought of a picture of Uncle Sam with an oil can, generously lubricating the bearings of all modes except the railroads. With the railroads, he would be pictured by an open journal box—putting in, perhaps a little oil, but also throwing in a few handfuls of sand.

What is going on is not rational, but repeated complaints arouse little interest. Perhaps the revelation of the ludicrous aspect of what is going on would be more effective; and more interesting too.

EVERY CITY A SEAPORT—Is it not a fact that it may now be possible for railroads to offer to many centers of heavy production the transportation economies for bulk products formerly enjoyed only by places on navigable water? This ability seems to be coming about from the advent of big cars, quick turn-arounds, and multiple-car rates (low because of reduced costs).

It is true, of course, that water transportation (when it pays no user charges) gets down to only a few mills per ton-mile. But rail routes are usually shorter, and rail movement far faster. In some places railroads have demonstrated their ability to compete for traffic under such conditions. And there are, of course, hundreds of places to which railroads can offer this service, where water transportation would be impossible, or impracticably costly.

As railroads, more and more, concentrate their service and marketing efforts on the kind of movements at which they can excel, their prospects take on a brighter and brighter hue.

WHY MISSISSIPPI FLOOD WAS SO BAD—On the question of why the flood on the Upper Mississippi was so severe this year, J. L. Bickert of Winnipeg mentions a radio broadcast suggesting that the desire to maintain water levels for river navigation might have had something to do with it.

My colleague John Mitros, who put in a lot of wet hours at the scene, believes otherwise. He tells me that qualified authorities put the principal blame on the unusual succession of snow, warmth (glazing a hard top on the snow) plus deep frost in the ground—producing the record run-off. Some 90% of the accumulation of ice and snow in the area took off down-river (compared with a normal 20%).

EFFECTIVE JULY 2:

Civil Rights Act of '64 goes into action

After a one-year delay, the equal-employment-opportunity section applies. Here's how employers and unions are affected.

A new law becomes effective in the land July 2—the Equal Employment Opportunity Law, Title VII of the Civil Rights Act of 1964.

One analyst has called the law's formula for coverage the "furthest reach of Congress' power" under the Commerce Clause of the Constitution. Virtually every railroad and rail labor union will fall within the broad definitions of employer and union which the act sets up. Only employers with less than 25 employees or unions with less than 25 members will be outside the scope of the law in its final effective stage—and that would leave only the tiniest of companies or labor organizations uncovered. Application of the law, basically, will be to employers "engaged in an industry affecting commerce" and to unions as defined in the Landrum-Griffin Act with certain extensions.

● **The law and its purpose.** Title VII's purpose, in its most simple definition, is to bar employer or union discrimination based on race, color, religion, sex or national origin.

Congress approved the act last spring, after long and sometimes bitter debate. It passed the House 290-130, and the Senate 76-18. President Johnson signed it into law July 2 of last year but, in following a precedent set by the Equal Pay Act of 1963, a long lead time was written into the bill so that employers and unions could bring practices into line with the intent of the legislation. That's why Title VII becomes effective July 2 of this year.

During the debates on Capitol Hill, employment provisions of the act were much in the news. But a year has passed since then, and the specifics of the bill—or certain parts of it—have long since left the front pages of newspapers.

Meetings have been held recently, in the railroad industry and others, to bring the knowledge of key management people back to a current status. But the application of the law will be on such a broad basis that a refresher on the Civil Rights Act might be a good thing for supervision generally, some industry leaders believe. This review of Title VII is intended to be a refresher-course of that type.

● **For employers:** So far as employers are concerned, it will be an unlawful employment practice:

—To refuse to hire or to fire a person for discriminatory reasons based on race, color, religion, sex or national origin. Discrimination with respect to compensation, terms, conditions or privileges of employment is also barred.

—To limit, segregate or classify employees in any way that could deprive or tend to deprive any person of employment opportunity or otherwise have an adverse effect on his employee status because of race, color, religion, sex or national origin.

Additional provisions

In addition to these basic provisions, the act also makes it unlawful for an employer to discriminate in the operation of an apprenticeship or other training program, to discriminate in job advertising or to act in retaliatory fashion against any person who has testified or participated in any proceeding arising under Title VII.

● **Intentional but . . .** The law provides that discrimination must be intentional—but, as one observer has pointed out, "this is not an important qualification. Discrimination is by its nature intentional."

Several other parts of the act are intended to clarify the intent—and to establish that certain employer practices are not barred:

—Differences in pay or working conditions are permitted if they are based on factors other than race, color, religion, sex or national origin.

—Use of ability tests is permitted, if the tests are not designed or intended to be used to discriminate.

—Discrimination is not prohibited where it is for reasons of bona fide occupational qualifications. This does not mean an ordinary qualification, such as a person's ability or experience—and the exception applies only to discrimination on account of religion, sex or national origin, not race or color. One analyst of the act estimates that justification for exceptions will be of significance only in the area of sex.

● **No preferential treatment.** While the law does set up firm bars against discrimination, it does not require employers (or unions) to give preferential treatment to any individual or group because an imbalance may exist with respect to the total number or percentage of persons of any race, color, religion, sex or national origin already employed (or admitted to union membership).

Enforcement of Title VII is both clearly provided-for and complicated.

First, the title will be administered by a five-member Equal Employment Opportunity Commission, appointed by the President, which will have the power to make interpretive rulings.

Actual enforcement procedure may be started by a complaint from an employee or job applicant who believes he has been discriminated against. Or, a complaint may be filed by a member of the Commission if he has reasonable cause to believe a violation has occurred.

● **Enforcement in action.** Once a complaint exists, the enforcement machinery will work this way:

—The Commission conducts an investigation. If it finds reasonable cause to believe Title VII has been violated, it tries first to get voluntary compliance.

—If no voluntary agreement can be reached, the aggrieved party may file suit in federal court (the Commission itself may not sue).

—Where a state or local Fair Employment Practices law exists, a complainant must seek relief under it first. But he may go to the federal Commission after 60 days, no matter what the result of the lower-level proceeding.

—As for timing, a complaint must be filed within 90 days of the alleged discriminatory act. The Commission has 30 to 60 days to do its job. And the individual must file suit within 30 days if he is notified that the Commission's efforts to get voluntary compliance are not successful. Timing is somewhat different if state or local laws exist.

Except in one principal instance, the federal Commission may work out agreements under which its enforcement functions are given, partly or wholly, to state or local agencies. The

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Railroad Division XLO | EX-CELL-O

GATEWAY to a giant billion dollar market . . .

Top mechanical officers will this year specify purchases of upwards of 65,000 freight cars and new locomotive units ordered should total at least 1,200. This is in addition to major expenditures for repair and rebuilding programs. Equipment outlays for 1965 should be well over the $1 billion figure.

Advertisers can reach the most important buying influences in this burgeoning, "come alive" market through the pages of America's earliest trade paper—*Railway Locomotives and Cars.* This magazine is edited solely for the specialized mechanical department of the railways. The buying resurgence in this field is reflected in the increase in RL&C circulation and the highly favorable subscription renewal rate of 81.5%.

RL&C is an excellent advertising buy on its own. It can also be used to strategic advantage paired up with advertising in *Railway Age* through combination rates—thus obtaining extra readership with relatively low additional net cost. For standard car parts and locomotive accessories, RL&C and *Railway Purchases and Stores* offer another ideal, economical combination. One of our salesmen will gladly stop by and explain our *selective* coverage joint advertising rates.

RAILWAY LOCOMOTIVES & CARS

Legal enforcement must be through the courts

exception concerns suits which the U.S. attorney general may bring to seek injunctive relief against alleged patterns or practices of discrimination. In such cases, there is no deferral to state or local groups.

● **Broad-based power.** Commission authority is fairly broad. Its investigations must be based on complaints filed. In effect, it has the authority to subpoena. But actual legal enforcement must be through the courts. One provision of the act requires that the progress of an investigation be kept confidential — but material gathered during the investigation may be used later in litigation under Title VII, or so the law seems to indicate.

(Several more detailed interpretations of Title VII are available. Three which have been widely used are publications by the Bureau of National Affairs and the U.S. Chamber of Commerce and an outline by R. K. Berg of the Department of Justice.)

Principal impetus behind passage of the 1964 Civil Rights Act, of course, was the Negro civil-rights movement. What the act will eventually mean to railroads and rail unions can't be forecast with any real degree of certainty at this point. But several factors may play a part in determining the impact of the law.

One is, simply, that railroads have long been a source of employment for non-white individuals. And, while comparatively few have risen to positions at a significant supervisory level, many factors bear on this which have little or nothing to do with discrimination per se.

● **The Plan for Progress.** A second point to consider is that a number of railroads are enrolled in the Plan for Progress—a joint project of major corporations and the President's Committee on Equal Employment Opportunity. First road to join was Southern Pacific, almost three years ago, and others have followed. Not long ago, SP Chairman D. J. Russell called his road's participation an indication of "our concern for and belief in the concept of equal employment opportunity without regard to race, creed, color or national origin." And he urged SP people to do "everything possible in company and community activities to ensure full compliance with civil-rights legislation and the Plan for Progress."

Still another indication of the railroad attitude on the matter comes in re-statements of company positions—re-statements designed to spell out exactly where the company stands. One of the most recent of these came from Reading President C. E. Bertrand, as an open letter to employees.

● **The spirit and the letter.** "Although Reading's employment practices conform to the new law," Bertrand said, "we are anxious to make certain that all officers and employees comply with its spirit as well as its letter. So that there may be no misunderstanding, I am taking this occasion to emphasize our policy.

"It is the policy of the Reading Company to insure equal employment opportunities for all employees without discrimination because of race, color, religion, sex or national origin. This means that we do not discriminate with respect to the hiring, compensation, terms of employment or working conditions of our employees.

"Our officers and supervisors have been informed of this policy and will follow it in selecting and promoting employees. They have also been instructed to see that employees reporting to them have knowledge of what our policy is."

Employee survey under way

Tied in with this policy is an employee survey Reading is making. Its aim, according to Bertrand: "To determine the talents, abilities and interests of our employees in order that we will be better able to implement our policy of promoting from within the ranks wherever possible and assure consideration of all qualified candidates as openings for various positions occur."

● **How about the unions?** These indications, and others, seem to make it clear that railroads, individually and as an industry, are fully aware of their obligations and what it takes to meet them. The next question, regarding Title VII, then, concerns the rail labor organizations.

Railroad labor has given the labor movement its most influential union of non-white membership, the Brotherhood of Sleeping Car Porters—whose president, A. Philip Randolph, is the only Negro vice president of the AFL-CIO as well as being a prominent figure in the civil-rights movement. But, just as some observers believe the industry has a reservoir of good-will among minority groups, so these same observers see a reservoir of less-than-good-will built up against certain of the brotherhoods which had long held to all-white membership policies.

If it's granted that the original organizing basis of many unions was fraternal in a sense, then it should not be surprising that membership qualifications were restrictive. But such restrictions have now been removed (as recently as two years ago, in the case of one operating organization, or by superseding law provisions in the case of at least one other brotherhood), and rail unions will be just as firmly under the Title VII provisions as will rail managements.

● **For unions:** Provisions applying to unions are similar to those applying to employers. The act makes it unlawful for a union:

—To bar or expel a person from membership for discriminatory reasons.

—To limit, segregate or classify membership in a discriminatory way so as to affect an employee adversely with regard to opportunity or status. The same prohibition applies to job applicants.

—To cause or attempt to cause an employer to discriminate.

—To practice discrimination in the operation of any apprenticeship or other training program.

—To discriminate in advertising, or take retaliatory action against a person who has testified or participated in a Title VII proceeding.

If there is any one point that can be made with some certainty regarding Title VII—aside from the fact that it becomes effective July 2, 1965—it is that interpretations may be months, perhaps years, in the making.

● **Public—and not public.** Some ambiguity could possibly arise with regard to what Commission investigation information may and may not be made public or used in litigation growing out of Title VII proceedings. Section 706(a), dealing with prevention of unlawful employment practices, specifically prohibits publication or use in subsequent proceedings of anything "said or done during and as a part of" the Commission's investigation and conciliation efforts. Section 709(e), covering access to records and evidence, prohibits publication of information obtained under the authority granted by the section "prior to the institution of any proceeding under this title involving such information."

As with most new ventures in legislation, there will be a shakedown period, while the differences in interpretations are ironed out. Meantime, as of July 2, Title VII will be the law in the land. ■

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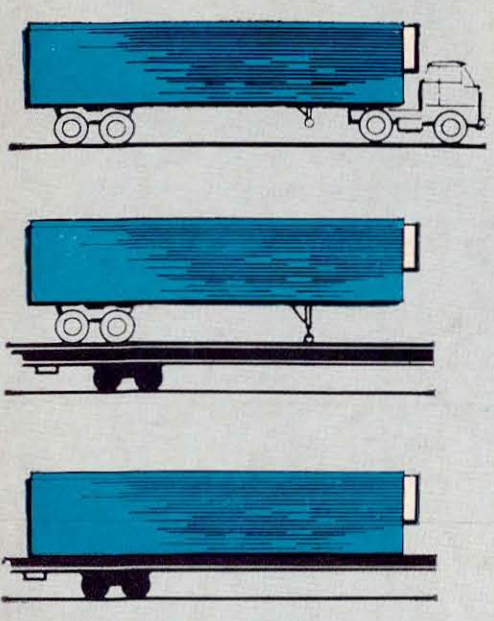

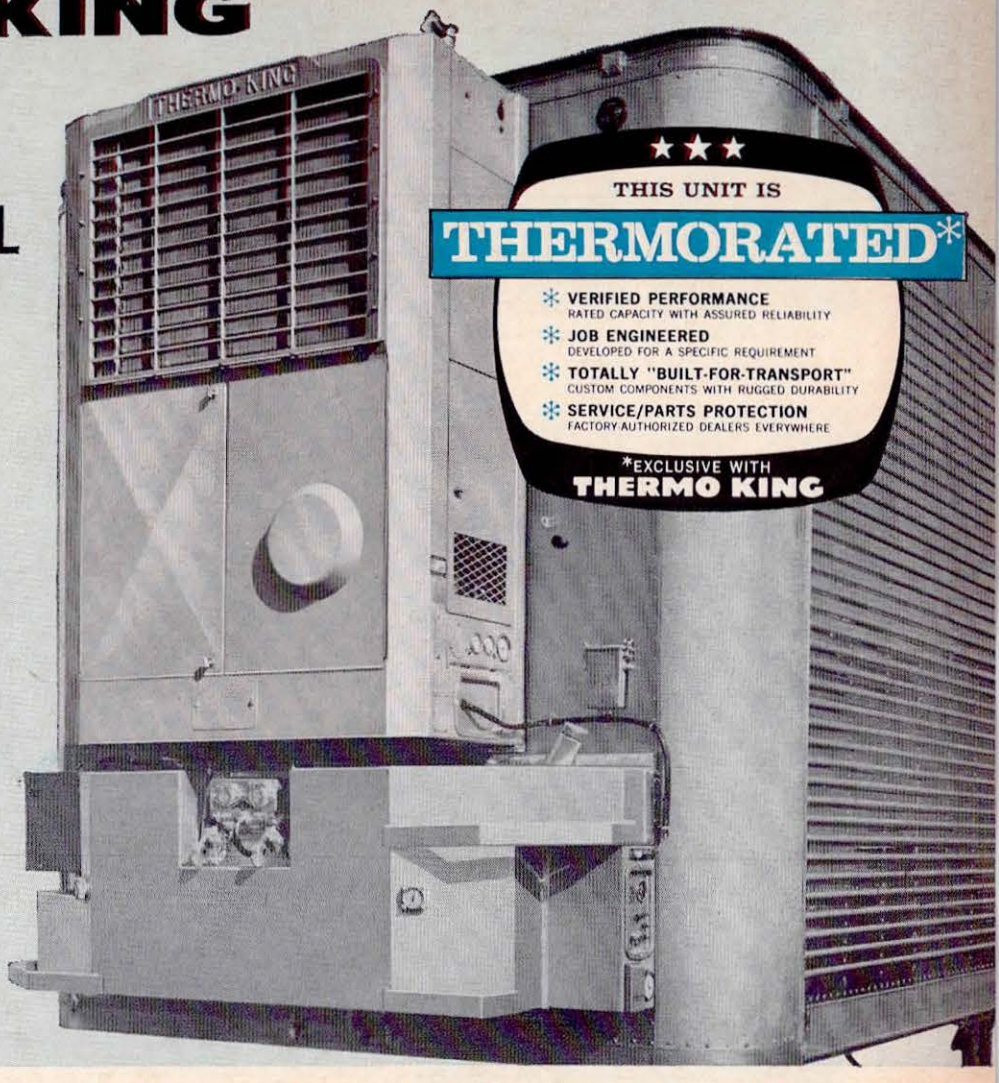

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Glen L. Farr
UP

PEOPLE IN THE NEWS

ALASKA.—Jesse R. Ward, assistant comptroller, Anchorage, retired April 30. **Alfred Lee Johnston** appointed acting assistant comptroller. **Britton E. Crosley** appointed chief of the newly established branch of internal audits. **Frank Y. Swanson** and **John V. Nelson, Jr.,** named auditors.

BALTIMORE & OHIO.—George W. Kearney, deputy communications engineer, appointed communications engineer, Baltimore.

CANADIAN NATIONAL.—Is offering the services of marketing specialists to Canadian industries to provide transportation "packages" best suited to each industry's present and future needs. **Georges R. Gagnon** of Montreal, has been appointed the first marketing manager, assigned to the meat and livestock industry.

H. R. Young, sales promotion officer, Great Lakes Region, Toronto, appointed area sales manager, Northern Ontario Area, Capreol, Ont., succeeding **E. G. Tufford,** transferred.

Patrick G. O'Malley, acting signal engineer, appointed signal engineer, Great Lakes Region, Toronto.

J. R. Kemp, mechanical and electrical engineer, Edmonton, Alta., appointed superintendent of equipment, Winnipeg Area, Winnipeg, Man., succeeding **H. G. Shipley,** retired.

R. H. Kinread appointed supervisor, statistics branch, regional comptroller's office, Winnipeg, succeeding **W. A. McDonald,** retired.

A. A. Pearson, editorial assistant, Montreal, appointed supervisor of advertising, Montreal, succeeding **Hugh F. MacLeod,** appointed public relations manager, **Grand Trunk Western** (RA, June 14, p. 44). **E. A. Souliere,** public relations representative, New York, appointed to a new position of supervisor of advertising, Montreal.

E. M. Hallonquist, system supervisor terminal operation, Montreal appointed assistant general superintendent transportation (technical), Great Lakes Region, Toronto, succeeding **E. H. Gilliatt,** promoted.

A. H. Ormrod, industrial development officer, Toronto Area, appointed special representative, Industrial Development, Great Lakes Region, Toronto.

CANADIAN PACIFIC.—A. Ferguson appointed assistant to general freight traffic manager —rates, with system jurisdiction, Montreal.

J. C. Ames, assistant to the vice president, named assistant secretary, Montreal, succeeding **J. C. Bonar,** who has assumed the newly created post of company archivist.

CHESAPEAKE & OHIO—BALTIMORE & OHIO.—Alois M. Link appointed manager financial planning services for both roads, with offices in both Cleveland and Baltimore. Mr. Link formerly held that position on the B&O.

H. B. Christianson appointed director of industrial engineering services of both roads, succeeding **W. J. Dixon,** who has joined the **Rock Island. V. P. Morgan** named assistant to director, industrial engineering services. **H. E. Meeker** and **K. P. Shoemaker** named senior industrial engineers.

CHICAGO & EASTERN ILLINOIS.—Rogers A. Werner named freight sales manager, Buffalo, N.Y.

INTERSTATE COMMERCE COMMISSION.—Howard R. Longhurst, chief, section of railroad safety, appointed assistant director, Bureau of Safety & Services, succeeding **Robert D. Pfahler,** recently named director of the Bureau (RA, May 31, p. 109).

Francis A. Silver, associate general counsel, retires June 30 after more than 44 years of public service.

JERSEY CENTRAL.—Frank J. Scally appointed general agent at the new traffic office, Monadnock Bldg., 681 Market Street, San Francisco, Calif.

KANSAS CITY SOUTHERN.—T. M. Neale, dining car superintendent, Kansas City, Mo., advanced to assistant general passenger agent there. **James T. Jarratt** replaces Mr. Neale. **W. L. Murray** named assistant general passenger agent, New Orleans.

KENTUCKY & INDIANA TERMINAL.—W. A. McDowell appointed to the newly created position of general industrial agent, Louisville, Ky. Mr. McDowell was previously regional representative industrial development, **Baltimore & Ohio,** Pittsburgh, Pa.

LONG ISLAND.—Richard G. Morrison, an internal auditor, named acting auditor of disbursements.

NEW YORK CENTRAL.—Arthur E. Baylis appointed to the new position of vice president —staff, effective Aug. 1. He will be responsible for traffic and marketing merger studies conducted in coordination with the **Pennsylvania. James R. Sullivan,** assistant vice president-freight sales and service, named vice president—marketing, succeeding Mr. Baylis.

John T. Lynch, assistant to general claims attorney, New York, promoted to assistant general claims attorney there.

NORTHERN PACIFIC.—G. F. Hill, communica-

AAF AMER-kleen air filters do a better job at lower cost on engine intakes and carbodies

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On-the-job operation in locomotives has clearly demonstrated these three major competitive benefits of AMER-kleen replaceable glass fiber filters.

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tions supervisor, Spokane, Wash., appointed general communications supervisor, Seattle, Wash., succeeding **F. A. Mackenroth,** assistant superintendent of communications, who retired June 1 after more than 44 years with the NP. **L. W. Portz,** communications maintainer. Spokane, succeeds Mr. Hill.

E. S. Stanchfield, traveling car service agent, appointed general car service agent, St. Paul, succeeding **A. H. Marty** who retired June 1 after nearly a half-century of service.

READING.—Lee R. Letterson, systems designer, **Chesapeake & Ohio,** Cleveland, appointed director of data processing, **Reading,** Philadelphia.

The following Engineering Department appointments have been made on the Reading: **J. W. DeMoyer,** assistant chief engineer; **D. E. Cowell,** production engineer; **L. D. Freeman,** engineer of track and work equipment; **G. W. Geiger,** electrical engineer; **J. C. Hunsberger,** division engineer, Reading Division; and **J. A. White, Jr.,** assistant division engineer, Philadelphia Division. Abolished positions of assistant chief engineer—maintenance (formerly held by Mr. DeMoyer), engineer of track (formerly held by Mr. Cowell), assistant electrical engineer (formerly held by Mr. Geiger), assistant division engineer of the Reading division, and engineer of work equipment (formerly held by Mr. White).

The following have retired: **J. E. Good,** assistant chief engineer; **J. W. Moorehouse,** electrical engineer, and **A. C. Palmer,** division engineer—special duty.

SOO LINE.—Thomas R. Klingel, vice president—operations and maintenance, Minneapolis, appointed senior vice president.

SOUTHERN PACIFIC.—William R. Denton and **W. Harney Wilson,** assistant general attorneys, named general attorneys.

TOLEDO, PEORIA & WESTERN.—Ralph Hudson appointed assistant vice president-traffic, San Francisco. He was formerly associated with the **Western Maryland.**

UNION PACIFIC.—Glen L. Farr, manager-labor relations, Omaha, elected vice president-labor relations, Transportation Division, succeeding **Adolph D. Hanson,** retired.

Supply Trade

Hugh W. Foster, manager of marketing, **Transport Leasing** division of **Pullman Incorporated,** has been appointed vice president, marketing.

Paul T. Jones, Jr., has joined the **National Cylinder Gas division of Chemetron Corp.,** Chicago, as manager, railroad equipment department's research and development. Mr. Jones was previously section head of metallurgy and electronics, for the **Southern.**

Myron Hawley has been named vice president, manufacturing and engineering, **Fairmont Railway Motors.**

Les Lunt, former executive vice president of **Spector Freight System,** has formed **Lunt Systems, Inc.,** at Torrance, Calif., and will specialize in automated freight handling systems. Mr. Lunt has been appointed western district sales manager for **SI Handling Systems** of Easton, Pa.

Hugh W. Foster
Pullman

Paul T. Jones, Jr.
NCG

Thomas M. Cavender has been appointed executive vice president of **Pettibone de Mexico, Pettibone Mulliken Corp.'s** newest subsidiary. Located just outside of Mexico City, the facility, which was completed last November, has 65 employees engaged in the production of track materials for the railroad industry and materials handling equipment for the construction field.

Berwick Forge & Fabricating Corp., Berwick, Pa., has opened a branch office in Chicago at 80 E. Jackson Blvd.

OBITUARY

A. V. Vallandingham died June 7 in New York. His career included service as an officer of the Delaware & Hudson, a member of the ICC's staff, and secretary of the Department of Commerce's Transportation Advisory Council which was abolished four years ago.

Confidence that Rides with a Quarter-Million Cars

One of our statistically-minded associates recently estimated that more than a quarter-million freight cars have been equipped with PITTSBURGH forged parts during the last half-century. Many have been in continuous service throughout that period.

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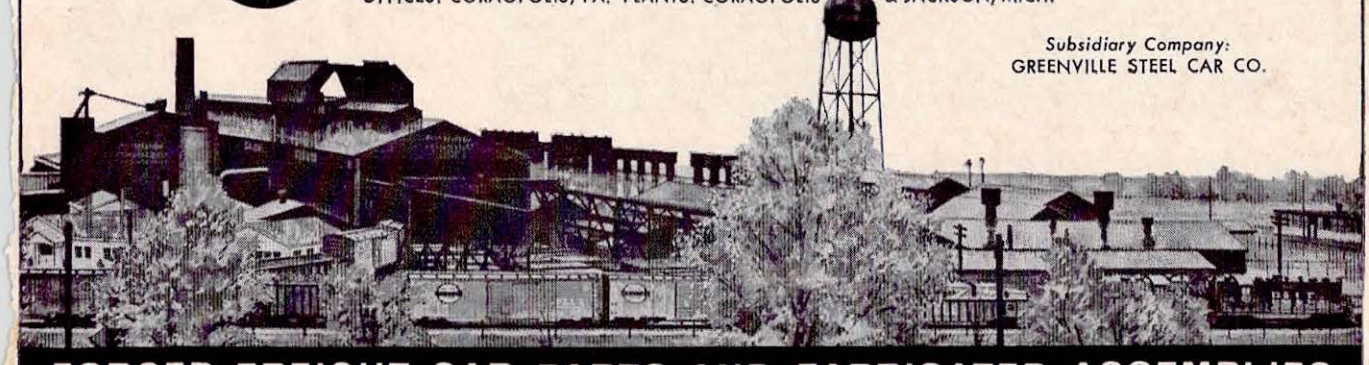

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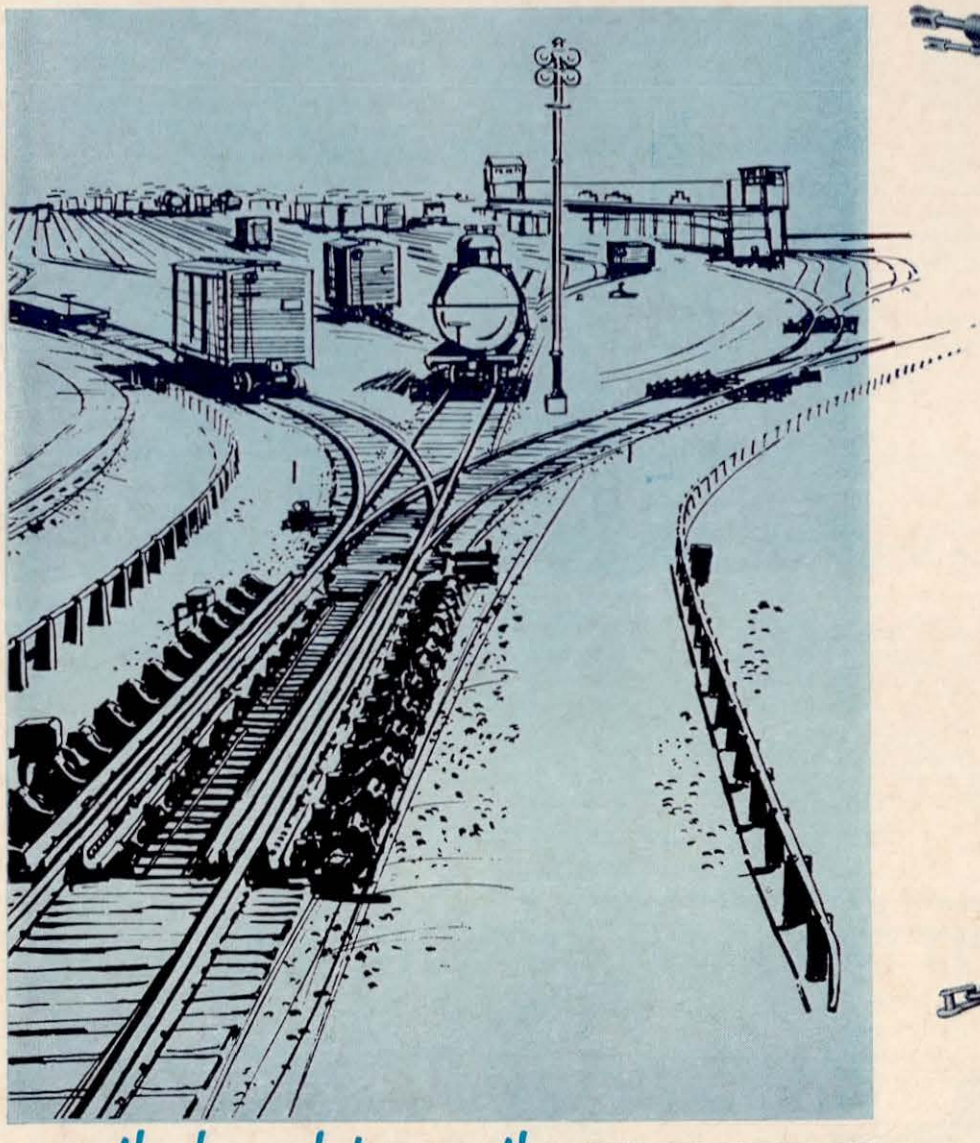

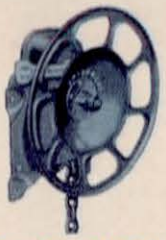

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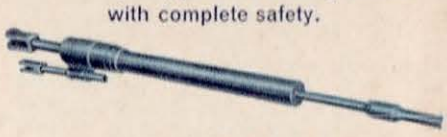

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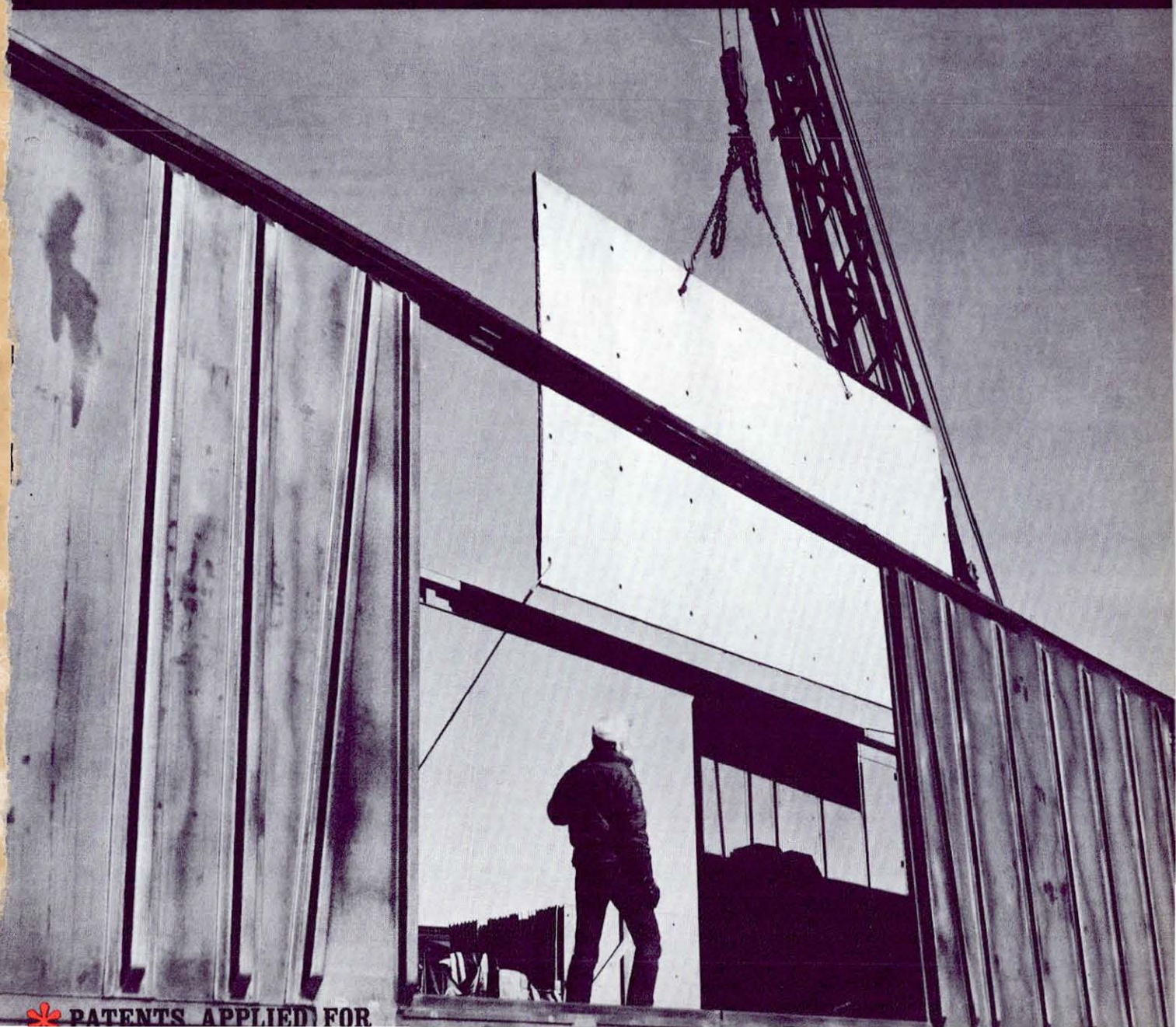

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Landreth panels increase insulation efficiency and cut costs

The new Landreth Pre-Molded Urethane Foam Panel enables railroads and car builders to build a better car faster and with less man hours in their shops. The new Landreth system enables the builder to provide a Urethane Foam car without the necessity of installing special machinery and costly facilities.

How to reduce costs and increase efficiency

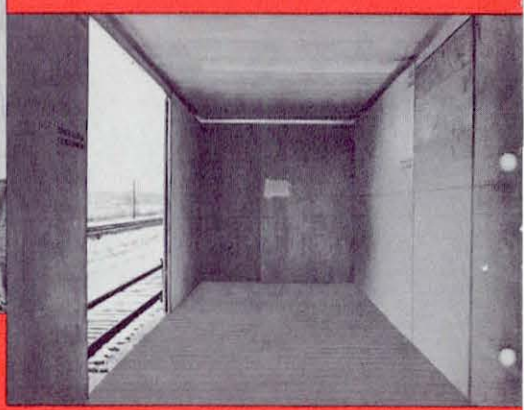
1 Workmen lowering end panel into place. Panels are moved into production line on freight cars and lifted into cars on cranes.

2 Workmen lowering side panel into place.

3 Workmen fitting side panels into place. Only 14 panels per car — panels are pre-trimmed, complete and ready to bolt into place for the sides, ends, ceiling, floor, and door.

4 Workmen fastening "Nelson" stud to outside post. Insulation thickness is reduced by ½ over conventional insulation materials.

5 Workmen inserting attaching device which when tightened, secures panel to side of car. This effective fastening system provides fastening without the normally associated heat loss.



6 Finished car. All joints foamed to insure a complete air-tight car.

Landreth's Pre-molded Urethane foam panels* proven best by test

The Inside Story of Budd Report #2238

The Landreth Insulated Car equipped with Landreth's Pre-Molded Urethane Foam Panels has just undergone exhaustive tests. After six months of road tests, the car was tested in The Budd Company testing laboratories in Philadelphia.

Here are the startling results from the Budd Laboratory's report.

The car constructed with the Landreth Pre-Molded Urethane Foam Panels was to be tested against two other cars constructed with Urethane Foam block. All the cars had been previously road tested for six months or longer.

The Landreth equipped car had absolutely *no air leakage, no hot spots,* and *no voids in the foam.* In addition, at 100 degrees differential, the car built with the Urethane Foam block had a BTU average of 143 BTU's per hour. The car equipped with the Landreth Pre-Molded Urethane Foam Panels also at 100 degrees differential and tested under the exact conditions, showed an average of just 93 BTU's per hour.

The Landreth Insulated Car was at least 50% more efficient than the car constructed with foam block. Conclusive proof that the Landreth Pre-molded Urethane Foam Panel—is "Best by Test"!

Over 2,000 cars equipped with Landreth Pre-molded Urethane foam panels*

Landreth continues to pioneer new equipment and systems for the transportation industry. Landreth's experienced engineers have dedicated over 60 years of service to the railroads as well as to the research and development of quality, labor-saving, and profit-making systems and products.

Our modern plants operating under controlled laboratory conditions, supervised by trained engineering specialists to insure the best possible insulation to *suit your custom needs.*

Ten foam machines, equipped to provide uniform volume and temperature control of the feed streams insure fast and efficient production.

Now you can free capital that would normally be invested in special facilities, research laboratories, engineering, and labor.

*PATENTS APPLIED FOR

Reduce labor costs with easy-to-install Landreth pre-molded Urethane foam panels*

Landreth Pre-Molded Urethane Foam Panels provide a lower K factor, as low as 0.11 (BTU's/sq. ft./hr./°F/in.) at 70 degrees as compared to 0.23 for conventional insulation. Over 90% of Urethane cells are closed. Thus, locking out moisture.

Highest quality controlled Urethane material on the market today

Patents applied for

Check these features that make LANDRETH pre-molded Urethane foam panels*— best by test!

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- ★ Thinner Walls
- ★ Completely Pre-Fabricated
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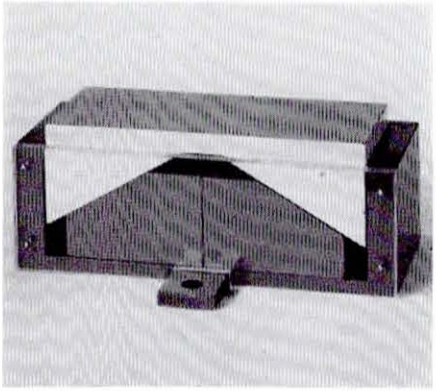
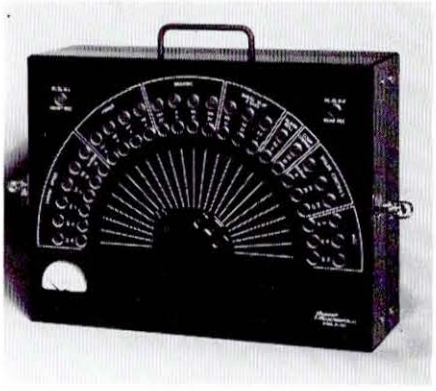
NEW PRODUCTS REPORT



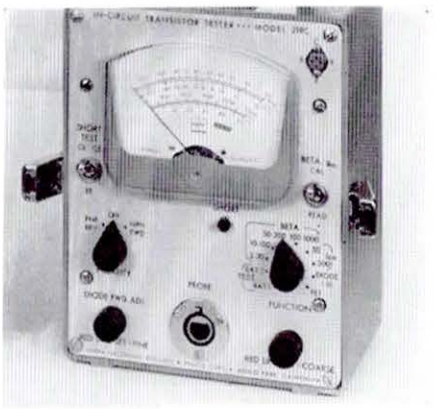
Side Bearing Stabilizer (RA-1)

Extensive road tests have shown the No-Sway side-bearing stabilizer to be effective in reducing excessive side sway of 90- to 150-ton high-cube cars and in reducing intensity of transverse shocks. Top and lower friction wedge blocks and heavy center springs absorb energy transferred to trucks by car-body sway. Stabilizer replaces the standard side bearing and is applied to truck bolster without car modification. *Security Railway Products Co.*



Trainline Tester (RA-2)

The Model TLT-1 trainline tester for diesel-electric locomotives checks the condition of the 27-conductor train-line cable and of all indication and warning lights, all relay control functions, governor controls such as air compressor, wheel slip, and sanders, and assures compatibility of all diesel units. Each is checked as a lead unit. An ammeter indicates loading condition of each circuit. The tester weighs about 15 lb. *Summit Electronics.*



Transistor Tester (RA-3)

A new solid-state model 219C transistor tester is specifically designed to make rapid, accurate incircuit transistor beta measurements. Model 219C will also render precise measurements of out-of-circuit transistor leakage current I_{co}; indicate diode reverse-to-forward ratio; measure the transconductance g_m of field effect transistors, both in and out-of-circuit; and show up a shorted junction in the transistor under test. *Sierra Electronic division of Philco.*

End Posts (RA-4)

Urethane end posts for insulated joints have been developed. The urethane elastomer is ten times stronger than natural rubber, withstands both elevated and subzero temperatures, and is virtually immune to impact and weather degradation.

To date, it has successfully withstood conditions that quickly destroy fiber laminations.

Dimensionally, the new post is equal to full rail height. Installed between new rails, it fits precisely between the ends and flush with the rail bearing surface.

Where rails are worn, replacement posts protrude slightly. The new material is resilient, compounded to depress under the weight of a car and return to full height an infinite number of times without breaking down.

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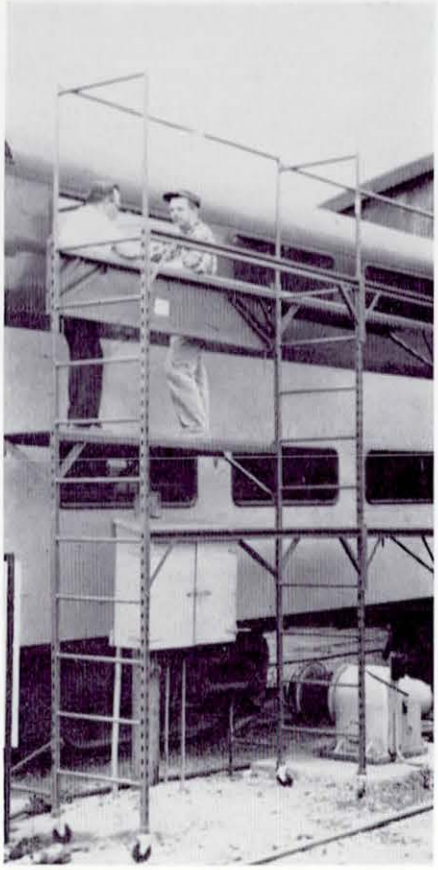
READERS' SERVICE DEPT. (Attention George Johnson)

NEW PRODUCTS REPORT



Alloy-Steel Workstand (RA-5)

Working levels of a workstand designed for the construction and repair of locomotives and cars can be adjusted in 3-in. increments. Basic unit, portable or permanently installed, is 29 in. wide; has an 8-ft span and a maximum standing height of 12 ft. Eight-foot sections may be added. Collapsible 18-in.-wide platforms of metal-bound marine plywood have a capacity of 500 lb. Workstand can be adapted for trailer service. *James L. Lyon Co.; Baker-Roos, Inc.*

Line Pole Caps (RA-6)

A low-density polyethylene pole roof protective device, termed CoverCap, prevents pole roof deterioration in the forms of decay, weathering and checks. Being non-metallic, it does not constitute a source of radio interference or set up undesirable moisture conditions caused by condensation.

CoverCaps are circular in form with a 1-inch overlap. Two circular ridges inside provide extra reinforcement. They are easily secured by nailing four tabs extended from the overlap, using 2-inch aluminum nails.

According to the supplier, there appears to be no need to apply additional preservative to the roof surface of a newly treated pole prior to the application of CoverCap. For cut-off or older poles, it is recommended that Osmose pole topper fluid, 10% pentachlorophenol, be flowed on the wood surface.

CoverCaps are available in five diameter sizes: 6, 7½, 8½, 9½ and 10½ inches for pole classes one through six. *Osmose Wood Preserving Co. of America.*

Microwave System (RA-7)

Microwave relay equipment is now available which carries a five-year warranty. Called the KTR II, the new rack-mounted relays can handle color or black and white television, including both video and voice, 960 simultaneous telephone conversations or 12 million bits per second of data traffic.

All solid-state except for the final klystron output, the KTR II operates from 24 to 48 volt batteries, as well as 110 or 220 volts AC.

The KTR II produces a 1.0 watt transmitter output and operates in the 5,925- to 8,400-megacycle frequency range.

Exceptional packaging achievements now permit complete front-access in-service maintenance, without need for interrupting traffic to insert extender cards or cables.

Routine maintenance is performed on intact transmitters and receivers through removable hinged panels on the front, allowing total access to radio frequency components. *Raytheon Co.*

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NEW YORK, N.Y. 10007

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I understand reprints of articles in this issue may be ordered in quantities of 250 or more.

Please quote price on ..... reprints of the article(s) beginning on page(s) .....

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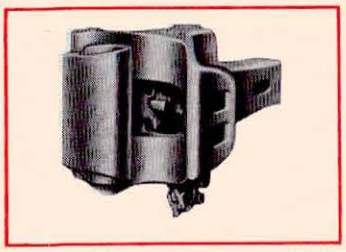
6/21/65

14 million National Couplers can't be wrong.



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4461-A

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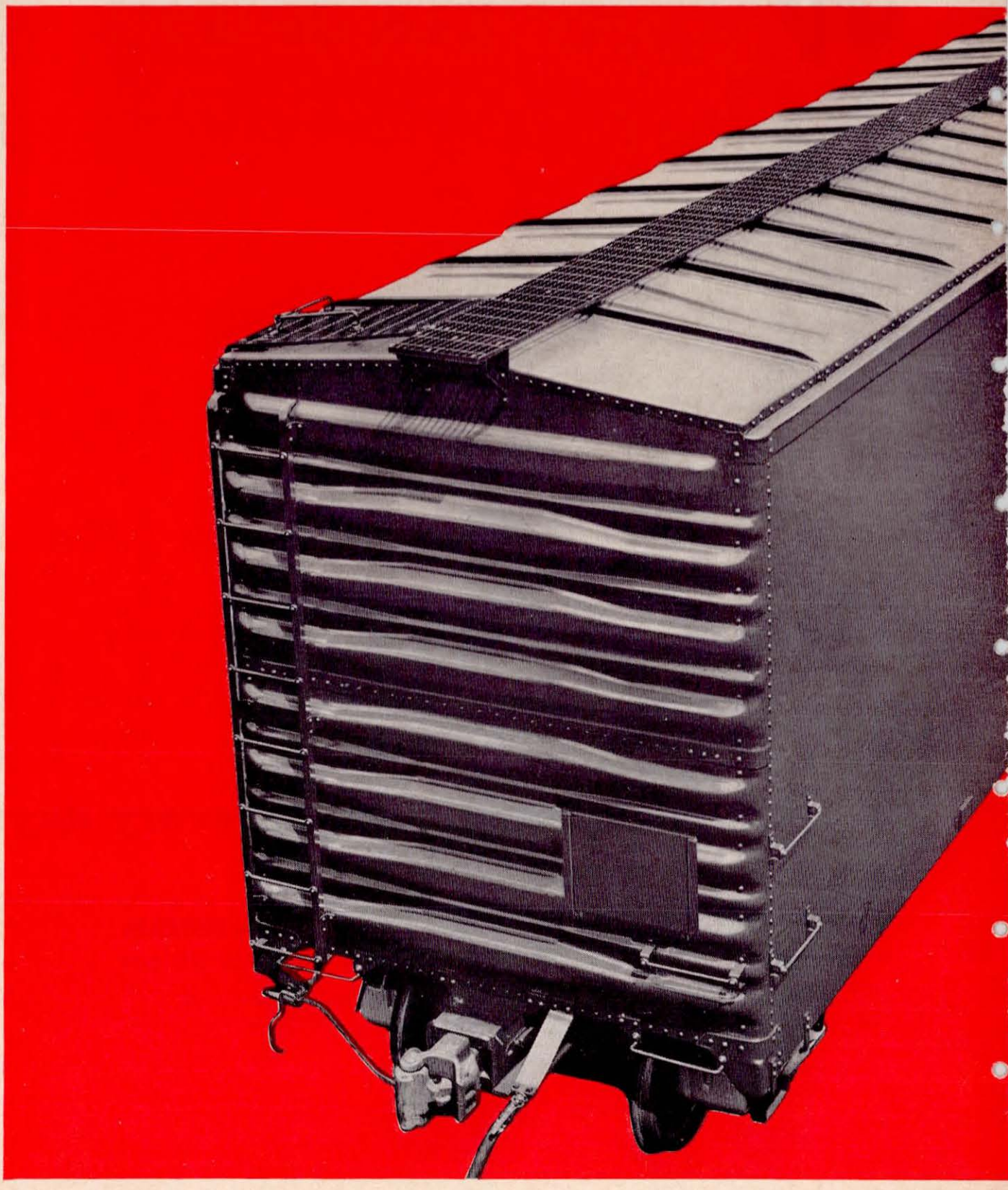
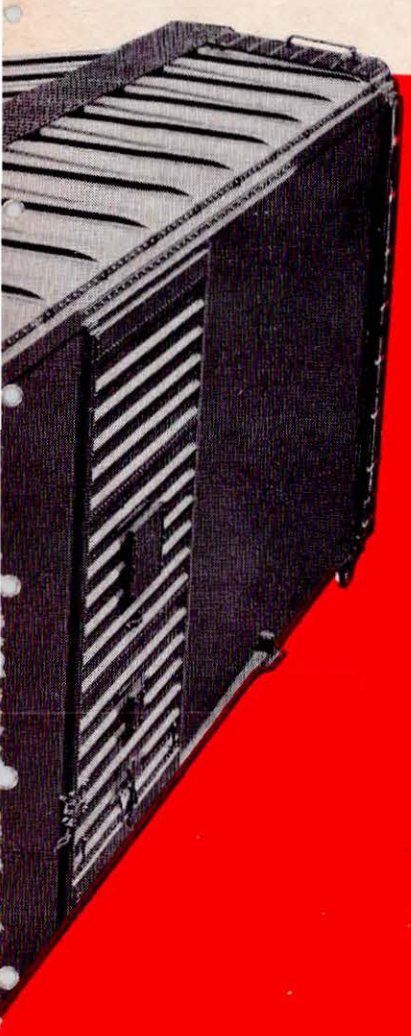


and lengthen box car life



Standard Diagonal Panel Roof

The strongest design possible for its depth. Resistance to twisting stresses keeps the car frame square. Lasts the life of the car.

Standard Dreadnaught Ends

The patented corrugations of Standard Dreadnaught Ends provide the greatest resistance to shock and impact—add strength where it's needed most.

STANDARD RAILWAY EQUIPMENT
division of STANRAY CORPORATION
Hammond, Indiana • Chicago, Illinois • New York, New York

CERTIFICATE OF EXCELLENCE

TO THE

ASSOCIATION OF AMERICAN RAILROADS

Against the background of rolling stock service experience, encompassed by critical observation and analysis of the inadequacies evident—we unreservedly subscribe to the requirements of the recently effective "Specifications for Design, Fabrication, and Construction of Freight Cars" for interchange.

While recognizing the advisability and desirability of some limited modification of detail, we endorse this exemplary advance in both the science and art of rolling stock development.

Commensurate with the unprecedented advance in functional adaptation to shipper needs, the timeliness of updating design, fabrication and construction requirements points up the awareness of the railroad industry for (and enhances the adaptability of) rail transport to meet changing needs.

Our development-engineering efforts and fabricating know-how are objectively dedicated to reinforcement of the precepts and intentions of these specifications.

James B. Lyle

PRESIDENT

International Steel Company

1321 Edgar Street, Evansville 7, Ind.

APPROVED FOR PROGRESS

We had every intention of *endorsing* the AAR specifications, but . . . the COMMITTEE demonstrated such advanced thinking—and produced such an excellent report—

WE DECIDED IT SHOULD BE AN AWARD!

MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended June 12 totaled 611,738 cars, the Association of American Railroads announced on June 17. This was an increase of 74,822 cars, or 13.9%, compared with the previous week; an increase of 15,972 cars, or 2.7%, compared with the corresponding week last year; and a decrease of 4,523 cars, or 0.7%, compared with the equivalent 1963 week. Ton-miles generated by carloadings in the week ended June 12 are estimated at 14.1 billion, an increase of 4.5% over the corresponding week of 1964, and 7.4% over the 1963 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, June 12

District	1965	1964	1963
Eastern, including Allegheny and Pocahontas ..	249,469	242,425	253,984
Southern	113,077	109,838	113,051
Total Eastern and Southern Districts	362,546	352,263	367,035
Northwestern .	90,864	83,148	85,266
Central Western	118,039	118,363	120,044
Southwestern ..	40,289	41,992	43,916
Total Western Districts	249,192	243,503	249,226
Total All Roads	611,738	595,766	616,261
Commodities:			
Grain and Grain products	54,928	54,278	55,824
Livestock	1,284	1,932	1,990
Coal	119,599	116,370	119,141
Coke	8,871	8,451	8,839
Forest Products	37,650	38,261	37,304
Ore	57,177	53,470	54,816
Merchandise l.c.l.	9,262	12,630	17,050
Miscellaneous .	323,597	310,374	321,297
June 12	611,738	595,766	616,261
June 5	536,916	573,651	605,361
May 29	608,532	568,158	549,861
May 22	605,893	586,884	598,419
May 15	601,655	583,105	601,062
Cumulative total, 24 weeks ...	13,242,084	12,933,601	13,000,549
Estimated revenue ton-miles (billions) 24 weeks	310.7	297.6	280.8

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended June 5 totaled 17,346 cars, compared with 16,693 for the corresponding 1964 week. Loadings for 1965 up to June 5 totaled 435,178 cars, compared with 375,620 for the corresponding period of 1964.

IN CANADA.—Carloadings for the ten-day period ended May 31 totaled 88,710 cars, compared with 80,595 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
May 31, 1965	88,710	33,091
May 31, 1964	102,674	33,898
Cumulative Totals		
May 31, 1965	1,505,448	524,564
May 31, 1964	1,533,301	542,445

FREIGHT-TRAIN CARS

► *Atlantic Coast Line.*—Ordered 2,275 new freight cars at a cost of more than $33 million. The order includes 800 70-ton 50½-ft box cars, and 200 50-ton, 40½-ft box cars to be built by Pullman-Standard; 800 100-ton covered hoppers for hauling phosphate or cement, from Pullman-Standard; 200 100-ton covered hoppers from Bethlehem Steel; 200 70-ton pulpwood cars from General Steel Industries; and 75 90-ton bulkhead flat cars from Evans Products. Delivery of the cars, all of which will be equipped with roller bearings, will begin in August.

► *Canadian National.*—Ordered 200 65½-ft, 90-ton gondola cars from National Steel Car. The cars, built primarily for steel industry service, will be the largest gondolas in CN service. Delivery will begin in November.

► *Grand Trunk Western.*—Ordered 50 100-ton, 2,600-cu-ft-capacity covered hopper cars from Pullman-Standard, 25 100-ton, 4,600-cu-ft-capacity covered hoppers from ACF and 50 70-ton, 60-ft flat cars from Evans Products. Cost of the orders is $1.6 million.

PASSENGER CARS

► *City of Philadelphia.*—Has awarded a contract to St. Louis Car Division, General Steel Industries, for 20 all-stainless steel commuter cars for Philadelphia area service. The cars, costing about $5 million, will be leased to the Pennsylvania for operation. They will be equipped with a new type of General-70 cast steel rapid transit truck, with full air suspension designed and produced by GSI's Casting Division.

► *Province of Ontario.*—Announced plans to purchase ten diesel locomotives and 48 125-passenger coaches for a new provincially financed commuter service to be established over a 52-mile portion of the Canadian National's east-west main line through Toronto, Ont. New equipment, additional station facilities, and right-of-way changes are estimated to cost $7.5 million. Projected 15,000 daily passengers using the new service are expected to be handled at a minimum of $1.5 million annual loss, which Ontario Government says will be preferable to the building and operation of four additional freeway lines that inevitably would be necessary if passengers commuted in private automobiles.

NEW FACILITIES

► *Baltimore & Ohio.*—Ordered nine Wheel Thermo-Scanner units from General Railway Signal. Eight of the units will be installed on the Akron-Chicago Division at Homer, Tiffin, Standby (2) LaPaz, Alida, Bascom and Cromwell. The Cumberland Division will get one unit.

FOREIGN

► *South African Railways.*—Is asking tenders for 247 electric suburban coaches, 92 powered and 155 not self-propelled. Bid deadline is July 16. Tender documents, without drawings, are available for review only in the Transportation Equipment Division, BDSA-6340, Department of Commerce, Room 4314, Washington, D.C., 20230.

YOU OUGHT TO KNOW

PRR's expensive inches: Pennsylvania's system-wide clearance-improvement program is now complete—at a total cost of about $2 million. Track, tunnel and bridge projects boosted clearances by an additional 15 inches—which, as PRR points out, put the cost at more than $133,000 per inch gained. Biggest and last project on the list was the daylighting of a two-track mainline tunnel near Radebaugh, Pa., to remove a 900-foot bottleneck (RA, March 22, p. 14). PRR did most of the job under traffic. Trains moved through the tunnel for 48 days while excavation was under way. Only in the last 11 days of the operation were detours necessary, and full-speed train movements began again June 11 after a week of reduced-speed operations to permit settling of a newly built roadbed.

CP's and Canada's tallest hotel: Canadian Pacific's 38-story Le Chateau Champlain, now under construction in Montreal, has had its last beam hoisted into place. CP Chairman N.R. Crump, President R. A. Emerson, and city officials were among 20,000 persons who put their signatures on the steel section. The $21 million, 640-room luxury hotel will open early in 1967.

Diversification for C&NW: Norwest Corp., a wholly-owned subsidiary formed for diversification purposes by Chicago & North Western, has made its first move—purchase of Velsicol Chemical Corp. for $90 million. Velsicol, which also owns 53% of Michigan Chemical Corp., is a producer of insecticides, herbicides and fungicides. Its consolidated pre-tax net income last year totaled more than $9.6 million. North Western said the purchase price will be paid with $27 million on the July 1 closing date, $33 million in 1966 and $30 million in long-term Norwest debentures payable 1968-79.

Floods hit hard again: This is the year of the flood, so far as western railroads are concerned. First there was the Mississippi River record-breaker. Then Southern Pacific was hit by flooding in Texas. Now the Denver area is suffering, and Denver's railroads with it. Power failures plagued the downtown district and blacked out the Rio Grande offices; train delays were common. Missouri Pacific, for example, had one passenger train stranded in Denver and held another at Scott City, Col. The eastbound "California Zephyr" was also held up over one night in the Denver yards and the "Denver Zephyr" was annuled on the same night. Colorado & Southern's yard got four to nine feet of water.

Muller installed as ASME president: H. N. Muller, vice president-engineering, Canadian Westinghouse Co., Ltd., Hamilton, Ont., Canada, has been installed as president of the American Society of Mechanical Engineers. Muller is the first president of ASME to reside and work outside the U.S.

New ICC secretary: H. Neil Garson is the ICC's new secretary. He has been on the Commission's staff since 1949 and its assistant general counsel for the past seven years. As secretary, he succeeds Harold D. McCoy, who retired at the end of last year. Since that time, Assistant Secretary Bertha F. Armes has been acting secretary.

Toronto Transport show: A big display of the latest railroad equipment will be featured in a trade show for the transportation industry to be held in Toronto next year. The first of its kind in Canada, the transportation show will be combined with a materials handling show and a mining and metallurgy show. Operating simultaneously, the three shows will take over the Industry Building, the Coliseum Building, and a large outside exhibit at Toronto's Exhibition Park, May 2-5, 1966. A highlight will be the use of a railway spur line adjacent to the show buildings for a major display of new railroad cars. The siding, less than 100 yards from the show buildings, provides double track for 40 cars.

Truck tonnage: Intercity truck tonnage in the week ended June 5 was 15% below the volume of the previous week, and 6.3% below the volume of the corresponding week of 1964, according to American Trucking Associations. The decreases are largely attributable to the Memorial Day holiday, which was observed on Monday of the latest week reported. The holiday was not observed during the comparable week of 1964.

Current statistics

Net income	
3 mos., 1965	$121,000,000
3 mos., 1964	133,000,000
Carloadings, revenue freight	
24 wks., 1965	13,242,084
24 wks., 1964	12,933,601
Freight cars on order	
May 1, 1965	35,138
May 1, 1964	32,973
Freight cars delivered	
4 mos., 1965	25,029
4 mos., 1964	23,829
Serviceable cars	
May 1, 1965	1,409,198
May 1, 1964	1,409,716

WESTINGHOUSE RUBBER-FRICTION DRAFT GEAR

MARK R-500

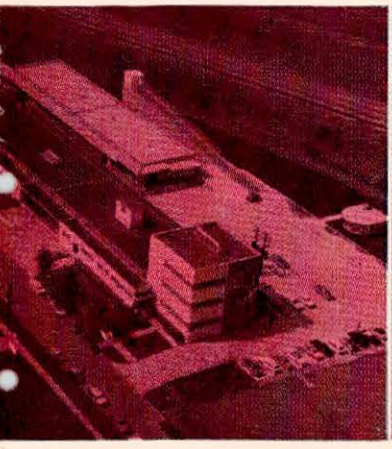
is the **first** **Rubber-Friction** Draft Gear to receive unconditional approval by the A.A.R., and bears A.A.R. Certificate No. 42, under A.A.R. high capacity specification M-901E.

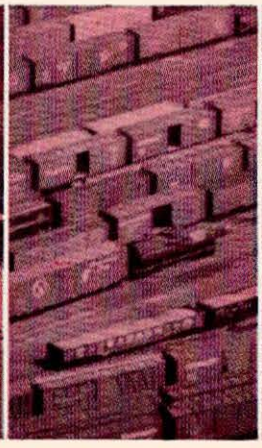
The R-500 was tried and proved in service and was granted unconditional approval as a result of the 2-year service check test. Not only did the R-500 receive exhaustive tests in the field, it also received rigid testing at the company's test plant and test track.

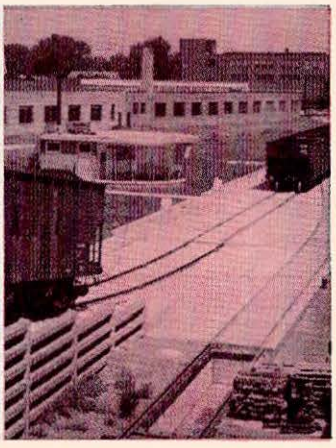
First to Receive UNCONDITIONAL APPROVAL

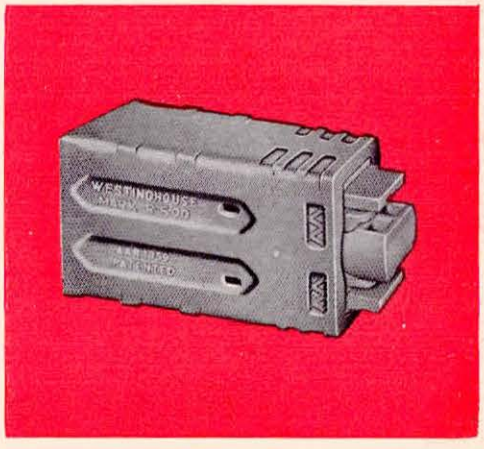
An outstanding feature of the R-500 is the friction clutch used in combination with heavy coil steel springs with a Butyl rubber inner core which assures high resistance to closure, resulting in less car maintenance, fewer bad order repairs, and longer service life.

When you use a Westinghouse Draft Gear be assured that it will perform the job for which it has been designed.









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LETTERS FROM READERS

Don't encourage L&D

Chicago

To the Editor:

Your Monday Morning Report of May 10, summing up the AAR Loss & Damage meeting in Dallas May 4-6, was very interesting and certainly a concern to everyone—be it shipper, receiver, equipment supplier, or railroad. Loss and damage actually affects every consumer in the country for he wants his dollar's worth for his dollar spent whenever he purchases an item.

Designing car equipment to lessen the "ordinary" shock forces is certainly a field in which we all realize there still exist some unknowns. This company so happens to be busily engaged in a cushioning device and is fully aware of the problems a railroad is confronted with in getting a train across this country without some type of lading damage occurring along the line.

In my opinion, one possible answer to arriving at a workable solution to reducing L&D claims would be this: *Stop advertising in billboard style on the sides of these cars* the fact that that *particular car is "Impervious to damage."* This kind of advertising invites two possibilities in the minds of those handling this "load protected car:

1. "Let's just see how protected it is?"
2. "Finally, a cushion car—I'll let this go a little harder to bunch up the stragglers on the north cut."

It is my feeling that this type of advertising only invites rough handling, and any improvement in customer relations is superfluous.

This company has requested the railroads using our cushion equipment to withhold the big print in lieu of using four-inch letters on the side or end of a car incorporating the requested information. That's really all that is necessary. While all love free advertising, in this instance we feel it is more prudent to skip it.

R. F. Murphy
Regional Sales Manager
Ajax Consolidated Company

St. Louis, Mo.

The passenger showcase

To the Editor:

I read with interest the article about passenger traffic in your May 15 issue and am glad that the railroads are trying to retain this traffic. I have always enjoyed train riding; since 1945 my wife and I have traveled between 10,000 and 27,000 miles per year by rail, covering almost every railroad in the U.S. and Canada and about seven countries in Europe. I regret to report that the U.S. trains have been going steadily downhill and their keeping of schedules does not compare with European railroads. . . .

Unless something is done to run trains on time, the younger generation is not going to be sold on the joys of railroad travel—and when the older generation ceases to travel, there will be no one to take their place.

They used to say that passenger trains were the Railroad Showcase; unless they can put something attractive in the windows, the Showcase has lost its function.

William W. Walsh

Scarcity of Capital

To the editor:

What you say about wages booming and investors not being paid enough (R.A. 4/19, p. 50) brings big crocodile tears to my eyes. Granted that everything you say is absolutely true, why is it that railroad stocks are so very popular with investors, who continue to buy shares in the earning capacity of these aggrieved carriers?

J. E. Weber

[Some of the most spectacular—percentagewise—rises in prices of railroad stocks have been in those of nearly bankrupt carriers. This does not mean anything to the procurement of *new* capital, with which to purchase new equipment and new plant—and railroads with poor earnings find the raising of *new* capital difficult if not impossible, in spite of the fact that their stock prices may have risen for speculative reasons—Editor]

Dividends Declared

ALLEGHENY & WESTERN.—Guaranteed, $3, semi-annual, payable July 1 to holders of record June 18.

BEECH CREEK.—50¢, quarterly, payable July 1 to holders of record June 15.

CANADIAN PACIFIC.—Common, $1.25, semi-annual, payable Aug. 2 to holders of record June 25.

ERIE & PITTSBURGH.—Guaranteed, 87½¢, quarterly, paid June 10 to holders of record May 28.

NEW YORK CENTRAL.—32½¢, quarterly, payable July 14 to holders of record June 25.

NORTHERN PACIFIC.—60¢, quarterly, payable July 30 to holders of record July 9.

PITTSBURGH, FORT WAYNE & CHICAGO.—Preferred, $1.75, quarterly, payable July 6 to holders of record June 10.

SEABOARD AIR LINE.—40¢, quarterly, payable June 28 to holders of record June 14.

SOUTHERN PACIFIC.—35¢, quarterly, paid June 21 to holders of record June 1.

UNION PACIFIC.—45¢, quarterly, payable July 1 to holders of record June 7.

WHEELING & LAKE ERIE.—$1.43¾, quarterly, payable Aug. 2 to holders of record July 16.

No other car decking can claim a tougher, stronger, higher axle load rating under any known condition. **The only hardwood, edge grain, tongue-and-groove plank locked by aluminum dowels.*

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Position Available

Associate engineering editor for Railway Age and Railway Track and Structures. Prefer young man with some training in civil engineering and experience in the maintenance-of-way field. Location Chicago. Write to Editor, Railway Track and Structures, 22 W. Madison St., Chicago, Ill. 60602.

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44-T, 45-T G.E., 90-T & 120-T Alco. PLUS other makes totaling 44 units.

Spare Engines, Traction Motors, Generators, Trucks etc. for all sizes locomotives.

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Large Midwestern Railroad seeks an experienced freight claim man with the ability, drive and energy to advance to Freight Claim Agent within a short period of time. Further advancement opportunities excellent based on demonstrated results. Salary open.
Send complete resume, including salary desired. All replies held in strict confidence.

AN EQUAL OPPORTUNITY EMPLOYER

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Tax bill needs industry push

Despite intensive industry work with local tax officials, discriminatory taxation is still one of the major problems facing railroads.

Many state tax officials still carefully avert their eyes when they collect taxes on railroad property. They cannot seem to kick the Robin Hood habit when it comes to taxing the carriers. This widespread unwillingness to tax railroads on the same basis as others is costing the rail industry more than $100 million in excessive tax payout, according to land and tax experts. It is also costing shippers the benefit of improvements the industry could make if it had that money to spend.

Railroads in past years, when they enjoyed strong business and earnings, were willing to support local governments generously by paying more than their share of local taxes. Railroads were—and are—good neighbors and citizens in the communities they serve. But, rail business and earnings have not been strong in recent years—and excessive taxation continues to the point where it is something like soaking the poor. Tax officials in many states are fighting to retain assessments of rail property that sometimes amount to confiscation by taxation. Indeed, there are states where tax officials can embalm present inequities into permanent practice with special laws "for railroads only."

This excessive ad valorem taxation is so widespread as to substantially diminish the industry's ability to secure the improvements it needs to be successfully competitive in today's tough transportation marketplace. James N. Ogden, GM&O law vice president and chairman of the AAR Law Department subcommittee on state and local taxation, says such taxation—far from lessening—is getting worse in some states.

There has been some progress—thanks to dedicated industry land and tax men. In Illinois last month, for example, the state supreme court ruled for the Burlington in a case against Cook County (Chicago) for recovery of excessive taxes paid for 1957. The case had been hotly contested by Cook County tax officials because the stakes were high—some $34 million to $40 million that railroads in the county claim for the years 1957 through 1962—if CB&Q won. The court, with some asperity, ruled: "We are aware of the impact of an adverse holding on the interested taxing bodies, but our decision cannot be based upon their financial needs." The court might well be forgiven this small measure of sharpness. CB&Q's was the seventh in a procession of similar cases over the last 10 years in which the state supreme court consistently condemned discriminatory taxation of railroads. In spite of these decisions, hundreds of similar suits are still pending throughout the state.

Best hope for the railroads is a bill which has been introduced in the 87th and 88th Congresses and which has been introduced by 11 different sponsors in the present Congress. Discriminatory taxation places an undue burden on interstate commerce and the bill would provide the railroads an avenue for appeal of the unfair portion of taxes by giving federal courts jurisdiction of such cases, away from state courts too often inclined to support local taxing authorities.

Local victories have been few

Industry tax men have worked for years trying to correct this immense problem locally. They have had some success. They have won court and administrative tax relief in a number of states. There is the notable decision handed down in Illinois last month. Southern Pacific won a curious victory in Arizona—where the courts, in effect, told SP, "Your'e right, but you can't have your money back." Chicago & North Western has a lower court victory that may ultimately result in tax equality in Iowa. Louisville & Nashville and four other roads are seeking equalization in Alabama. Southern has filed a case in Tennessee saying that inasmuch as the railroad is assessed at 100% of value, other property (assessed often as low as 10%) should be assessed at 100%, which is what the law requires. Kansas railroads have won substantial administrative relief over the past six years. Kentucky and Mississippi tax officials are giving administrative relief to their railroads—and there is some progress reported in Ohio, New Jersey, Florida, New York and other states.

But, all the hard work and costly court actions have not secured any large-scale reduction in discriminatory taxation. "Discriminatory taxation is so deeply ingrained in the practices of local taxing bodies," notes one top industry tax expert, "that we can't root it out without some clear mandate from Congress." Support for the bill now in the hands of the 89th Congress should clearly have a top industry priority.

One would have hoped that state governments could have dealt with the problem. Indeed, some already have, but, politics being what they are, fairness is impossible to get in some states. At a time when the industry needs every dollar it can get to meet—and better—the competition, that $100-or-so million in overtaxation is a mighty important objective to railroads and shippers alike.

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